

Spring 2018

Envisioning the South End of Tomorrow: Live, Work and Recreate in a Transforming Neighborhood

Chris Alpay

Leanne Blue

Jon Bronenkant

Hao Fang

Anthony Gemma

See next page for additional authors

Follow this and additional works at: https://scholarworks.umass.edu/larp_grad_research



Part of the [Environmental Design Commons](#), [Landscape Architecture Commons](#), and the [Urban, Community and Regional Planning Commons](#)

Authors

Chris Alpay, Leanne Blue, Jon Bronenkant, Hao Fang, Anthony Gemma, Rachel Guilfoil, Silke Henstebeck, Barbara Lampson, Andrew Libby, Kyle Nevarro, Karina Ramos, Stephen Roach, Genevieve Shepard, and Jasmine Su



**ENVISIONING THE SOUTH END OF TOMORROW:
Live, Work and Recreate in a Transforming Neighborhood**

Chris Alpay • Leanne Blue • Jon Bronenkant • Hao Fang • Anthony Gemma • Rachel Guilfoil • Silke Henstebeck
Barbara Lampson • Andrew Libby • Kyle Navarro • Karina Ramos • Stephen Roach • Genevieve Shepard • Jasmine Su



**ENVISIONING THE SOUTH END OF TOMORROW:
Live, Work and Recreate in a Transforming Neighborhood**

Chris Alpay • Leanne Blue • Jon Bronenkant • Hao Fang • Anthony Gemma • Rachel Guilfoil • Silke Henstebeck • Barbara Lampson • Andrew Libby • Kyle Navarro • Karina Ramos • Stephen Roach • Genevieve Shepard • Jasmine Su

UMass Amherst Design Center in Springfield
Department of Landscape Architecture & Regional Planning
Senior Urban Design Studio Fall 2017
Professor: Frank Slegers

Contact
Frank Slegers
Associate Professor
Dipl.-ING., MLA, Landschaftsarchitekt
Department of Landscape Architecture and Regional Planning
210 Design Building
University of Massachusetts
551 North Pleasant Street
Amherst, MA 01003-9357

Email: slegers@larp.umass.edu
Phone: 413-577-0848
Fax: 413-545-1772



© UMass Amherst, Department of Landscape Architecture and Regional Planning - UMass Design Center in Springfield, 2017

Graphic Editing: Hao Fang • Text and Final Editing: Frank Slegers

Printed: March 2018 This project was sponsored through the US Dept of Housing and Urban Development and the City of Springfield.

Previous Page: A group of Italian immigrants at work laying tracks for the trolley on Maple Street. Photo courtesy of D.J. D'Amato.

Contents



Senior Urban Design Studio Fall 2017

Page

6	Acknowledgments
7	Introduction and General Recommendations
8 - 10	Understanding the South End
Site Analysis	
11 - 13	Site Analysis
14 - 15	Land Use and Zoning
16 - 19	Natural Systems
20 - 21	Street Hierarchy and Impervious Surfaces
22 - 23	Combined Sewage Overflow and Stormwater Management
24	Study Model
25	Field Trip Boston
26	Conclusion
Design Proposals Overview	
28-29	Design Teams
31-42	Giving the South End the Right of Way
43-54	The South End - a Gateway and a Home
55-66	Filling the Gap
67-78	Growing the South End
79-101	The Greenscape System in the South End
102	References

- Studio Project Area
- Studio Goals/Studio Process
- Community Engagement
- Demographics
- New Development in the South End
- Public Open Space System
- Existing Tree in the South End
- Topography

Acknowledgments

The Department of Landscape Architecture and Regional Planning, UMass Amherst, continues the successful and long-term collaboration with the Office of Planning and Economic Development of the City of Springfield in the fall of 2017. The studio is coordinated and supported through the City of Springfield and the UMass Design Center in Springfield. This studio has been a crucial part of this partnership and created strong bonds with the local planning departments.

We are grateful to Mayor Dominic Sarno for his ongoing support of the UMass Design Center in Springfield.

We sincerely thank Scott Hanson from the Springfield Department of Planning and Economic Development for his untiring enthusiasm and great cooperation through all stages of this project. We also thank Shayvonne Plummer from the Springfield Department of Planning and Economic Development for providing critical feedback for the students at our stakeholders meeting.

We thank Sarah Page from Way Finders for connecting with many people in the South End and engaging with our students. We would also like to thank the South End Business Association for inviting us and exhibiting our work. We are specially grateful to Leo Florian and Susan Mulvey and all residents that attended our presentation. We hope that we could initiate new ideas and discussions that result in making the South End a great place for current and new residents.

We are grateful for the lunch meeting we had at the Springfield Technical Community College and the conversations with the students of Landscape Contracting and Professor Tom Smith. We learned that the public open spaces in the South End could be more attractive for young adults.

Special thanks go to our guest jurors Rachel Loeffler, Phil Burdick and Steve Roberts. Their input and advise was critical to develop our work in the right direction.

We specially thank Michael DiPasquale, Director UMass Amherst Design Center for his insightful critiques and recommendations regarding the project area and the proposed designs. We are truly thankful for the faculty of the Department of Landscape Architecture and Regional Planning for participating and contributing their valuable comments during our studio reviews.

Finally, we thank all the students in this Urban Design Studio for their great work to develop and present creative and integrative ideas for the City of Springfield.

We are specially thankful to Hao Fang who compiled and edited this comprehensive and most inspiring report with effort and enthusiasm.

Frank Slegers
Professor and Studio Instructor, Associate Director UMass Design Center in Springfield

Downtown Springfield is currently undergoing a substantial change of the physical urban fabric. The most visible examples are the construction of the MGM Casino Resort and the renovated Union Station into a multi-modal transportation hub. The MGM Casino Resort is the first one in the country that is integrated in a core downtown area with a Host Community Agreement to either utilize existing venues for entertainment or revitalize locations that have been dormant for decades. This Host Community Agreement with the City also contains the creation of new market rate housing in downtown, the redesign of Riverfront Park on the edge of the Connecticut River and other inner-city improvements While some of these improvements could not have been possible without the \$1.2 Billion investment from MGM, it is obvious that downtown and its adjacent districts will change substantially.

How can MGM be a catalyst for positive additional investment and urban initiatives? How can different uses next to each other coexist productively or can negative influences be being mitigated? How can people that live in the South End benefit from urban development? Will their neighborhood become a healthier, more beautiful and more social place? How can the South End maintain its diversity while obtaining more space for expressing culture in a positive way?

Is it possible to strengthen different districts in the neighborhood ad build on their uniqueness and character?

Introduction and General Recommendations

Our design solutions can be synthesized with these recommendations to make the South End livable for everybody:

- Plant big street trees throughout the neighborhood to filter air and make the streets more walkable.
- Redesign residential streets that prioritizes bicycle and foot traffic.
- Create pedestrian crossings for Main Street and East Columbus Avenue to slow traffic down.
- Create infill development on Main Street that supports local businesses and attracts new ideas.
- Use vacant lots in the neighborhood for new housing that is green, innovative and attractive for diverse demographics.
- Create small places to sit and gather.
- Reduce the impact of stormwater runoff through swales along streets and underused land.
- Create a multi-scalar greenway system for the whole neighborhood that creates a network of green squares and green streets.
- Address the diversity in the neighborhood and embrace the diversity of cultures through visual and performative art and ethnic food.
- Elimination of on- and off- ramps within the core of downtown to prioritize pedestrian movement to the Connecticut River and reduce noise.
- Design East and West Columbus Avenue as pedestrian- and bicycle-friendly corridors through a road diet and speed reduction.
- Foster Connections underneath I-91 and across the Railroad to engage the Connecticut River and the Riverfront Park.

The Location of the South End



Our study area lies within the South End neighborhood with the Connecticut River to the west, Union Street and the MGM Casino Resort to the north, the hillside edge around Ashmun Street to the east and Broad Street to the south. The area was victim of a tornado on June 1, 2011. Much of the damaged area has been restored. Only 3,000 people live in the South End. The South End neighborhood has a significantly higher Latino population, higher poverty and unemployment rates, lower educational attainment, and lower median household income than the City of Springfield as a whole.

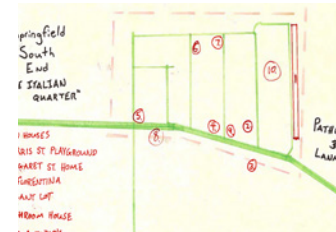
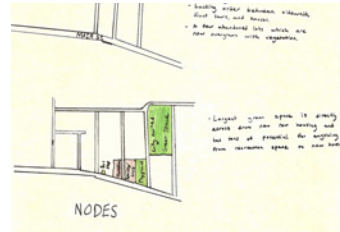
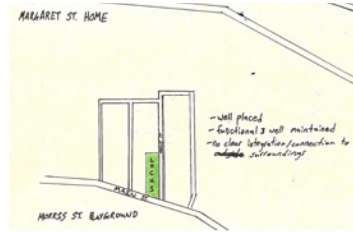
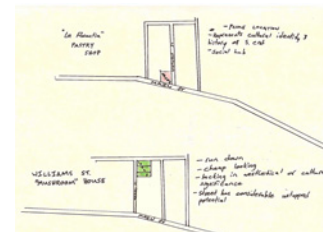
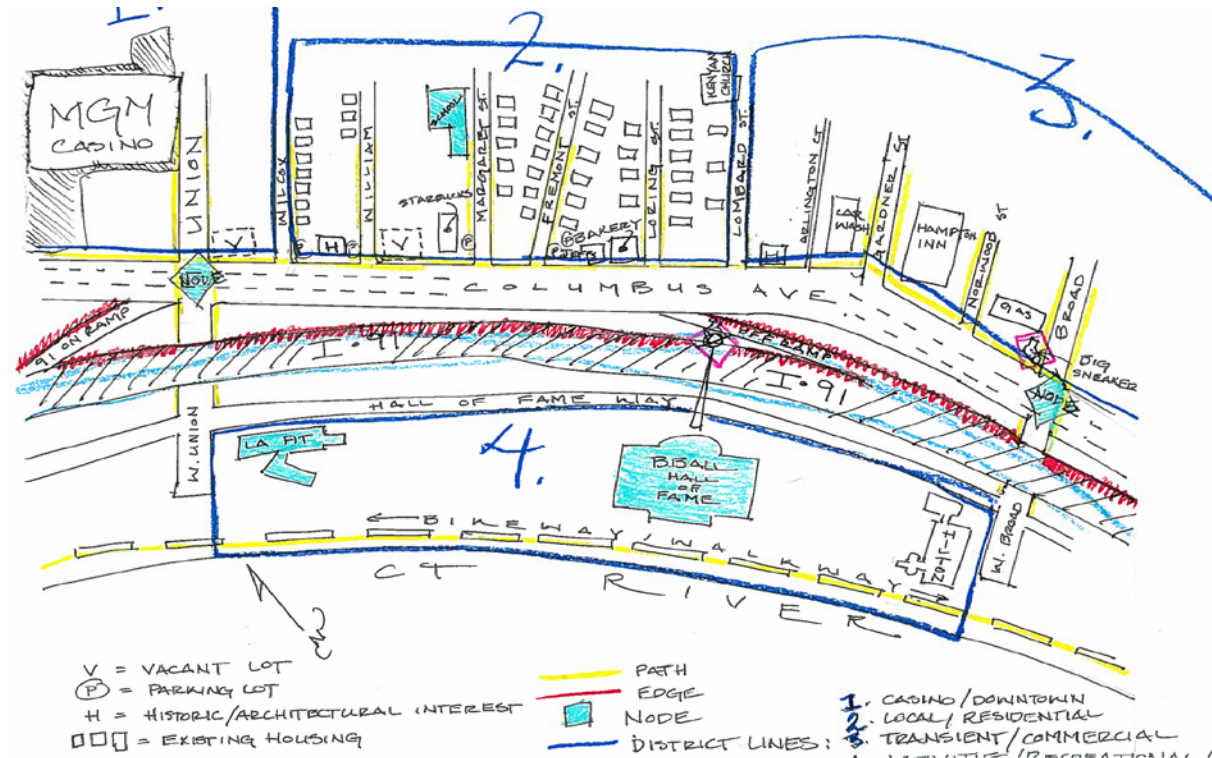
Studio Goals

- Respond to the opportunities & challenges from the development of the MGM Casino Resort
- Design to make street & public spaces engaging for residents, workers, & visitors
- To guide future planning & economic development in the South End of Springfield



Guided tour of the South End

Understanding the South End



Street experience and Mental Mapping

Community Engagement

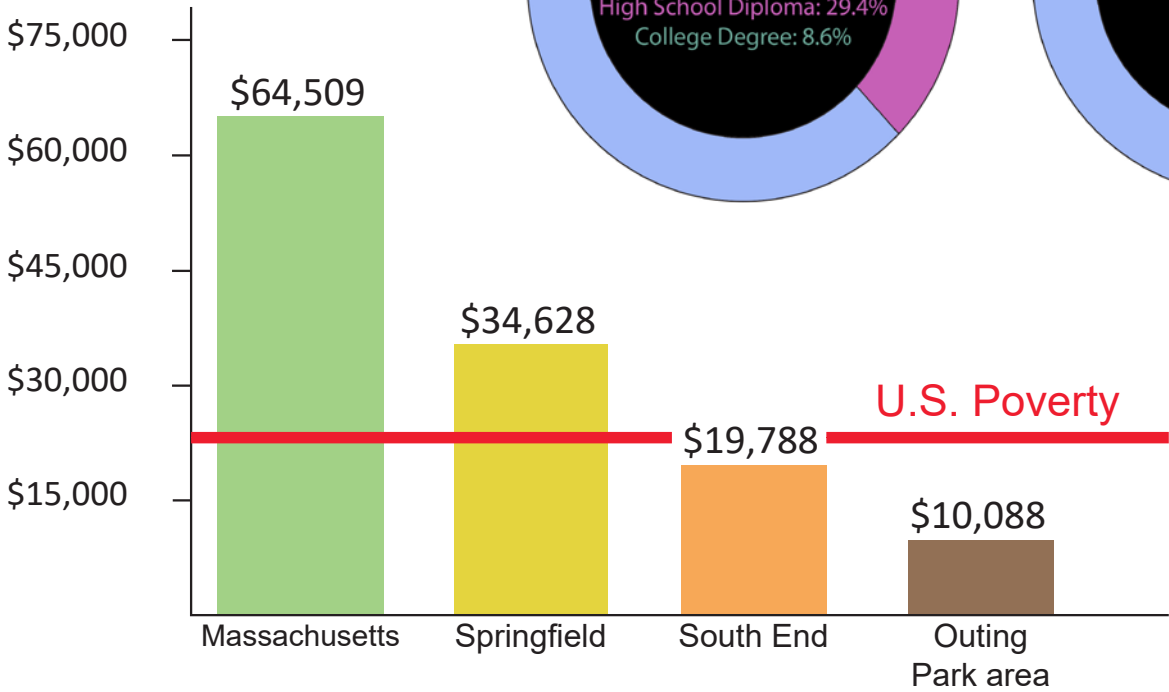
We engaged with residents on the streets with an informal survey, held a question and answer session with stakeholders at the Planning Department, had a lunch-hour gathering with students of the Springfield Technical Community College for feedback and presented our final designs to the South End Business Association. These were the major findings that were influential for our design program and final design solutions.

- Create a gateway experience on southern Main Street
- Encourage more mixed income/owner occupied housing
- Create a relationship between Union Street and MGM
- Envision East Columbus to accommodate chain stores
- Develop legible districts along Main Street that responds to residents and visitors
- Accommodate for diverse needs for the residents today such as small places to sit and gathering spaces for adults
- Accommodating for the future: visitors, employers, children, young adults and business owners



Demographics

South End in Comparison.



4,386 people live in the South End with about 2,038 housing units. Only 7.8% are owner-occupied which is far below the city average of 49%.

All data compiled from South End Revitalization Plan

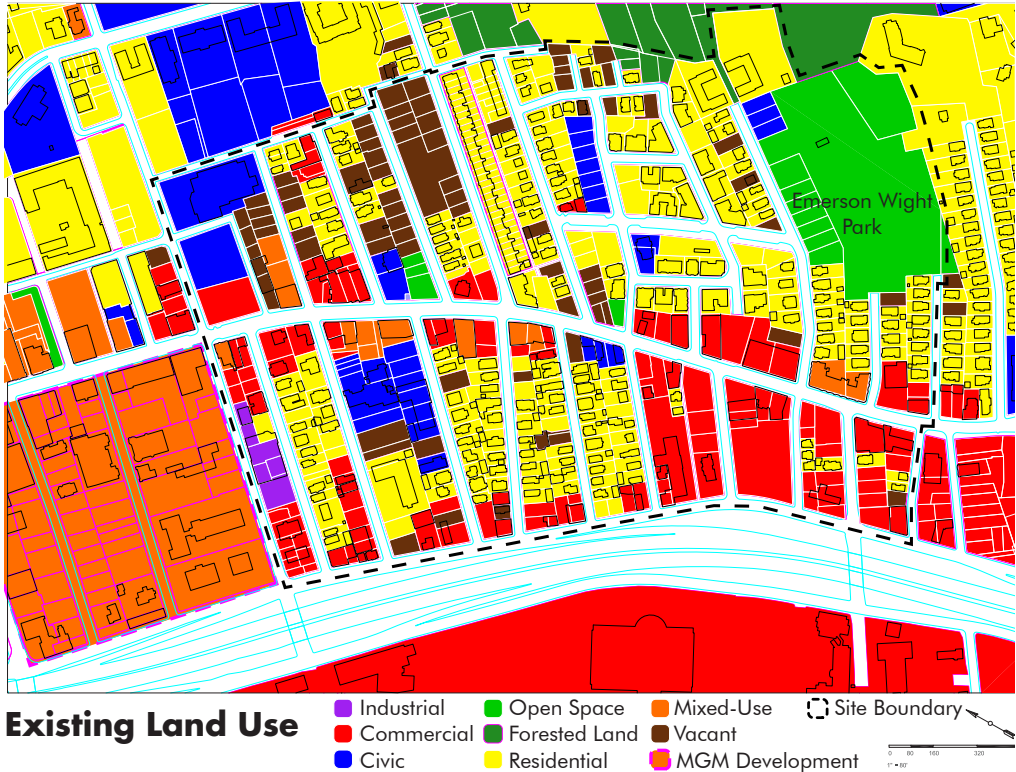
New Development in the South End

MGM Springfield is a \$950 million resort casino under construction in Springfield, Massachusetts. The casino is scheduled to open in the fall of 2018. Studies show that the Casino will bring more employment into the City while it will generate new incentives for market-rate housing. Negative effects are increased traffic and air pollution.



Land Use and Zoning

Significant amount of vacant land disrupts urban fabric in the South End while at the same time it creates significant design opportunities. There are also some car-related businesses that are inappropriately located in the middle of residential districts and are an impediment for the living population with noise and smoke emissions. Accessible public open spaces are not well distributed in the neighborhood. While Emerson Wight Park in the south offers areas for recreational and leisure uses, the central areas of the district are undeserved with pocket parks and smaller gathering areas. I-91 isolates expansion of uses from the South End to the Riverfront. Our recommendations are:

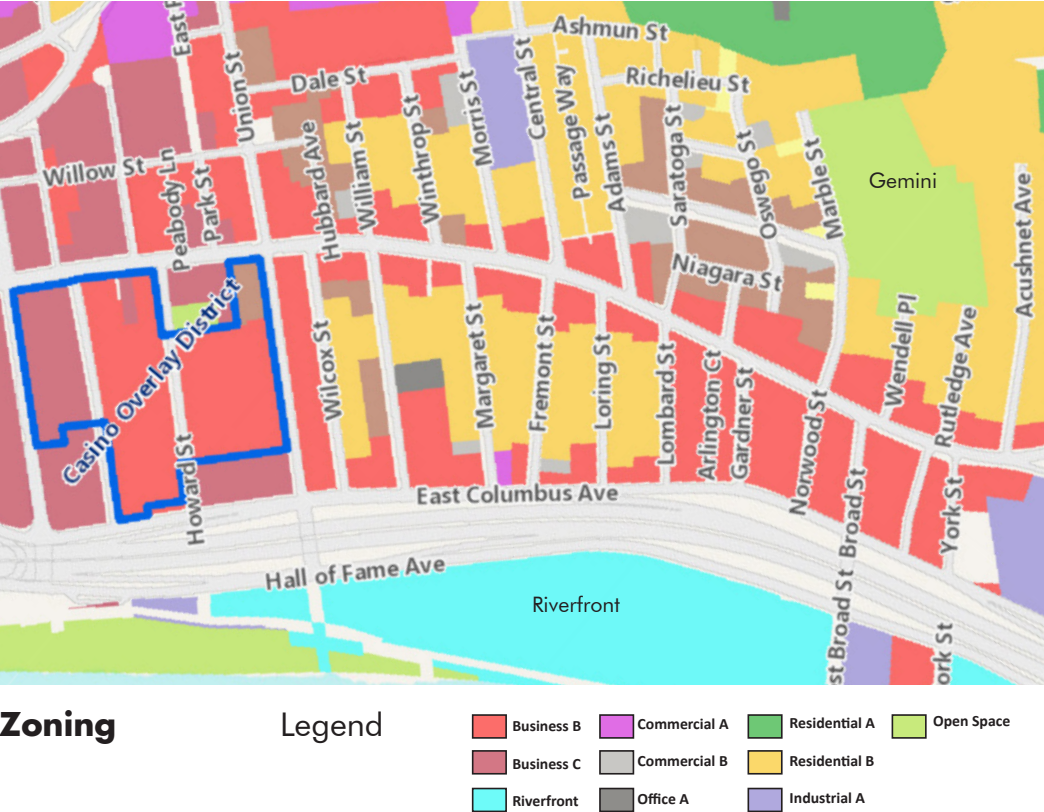


- Residential land uses needs to be protected and expanded in the neighborhood.
- Commercial uses should be better aimed at the neighborhood and the pedestrian.
- Zoning districts could be adjusted to benefit both South End residents as well as the MGM development.
- Create more connections across I-91

Land Use and Zoning

The zoning districts follow generally the existing land use patterns. We think that the area needs more areas that allow for neighborhood-related businesses and services (Business A). Business B allows highway-oriented businesses that are decremental for walkability, smaller businesses and mixed uses. There is also a lack of areas that are zoned for open space. This includes the Riverfront overlay district. Preference is given to commercial activities while recreation and ecological uses would be better to improve air quality and accessibility to the Connecticut River.

- Main Street’s Business-B classification allows for too broad a range of commercial activity and should likely be changed to Business A
- The Gemini Site is currently classified a Industrial-A. This area will need to be rezoned to reflect future development.
- The riverfront is not zoned to protect ecological and recreational integrity of the River corridor.



Public Open Space in the South End



Emerson Wight Park

- Located close to Main Street
- Featuring basketball courts, playground, expansive lawn, and new community center building
- A stronger connection to Main Street would encourage more use
- The proposed Marble and Ashmun Street connection (in pink) would benefit access to this park



Public Open Space in the South End

Main Street Tot Lot

- Located on Main Street
- Featuring playground and small lawn
- Located next to the Mt. Carmel Community Center
- High visibility creates an opportunity to make an impactful and memorable space that would feel more protected and enclosed



Riverfront Park

- Located across the South End, separated by highway
- Accessible by two separate vehicular underpasses on each edge of the South End
- Easier access from the South End would increase usage
- A more cohesive and safe pedestrian connection along the Connecticut River Walk and Bikeway would increase usage and perception of public safety

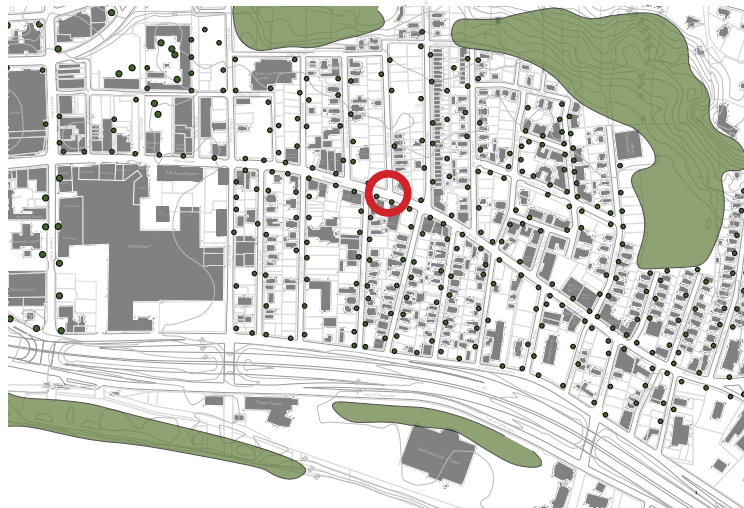


Gemini Site

- Located in the center of the South End.
- Easily access for most of the South End residential area.
- Located next to the Northern Heights row housing.
- Site was formerly home to a 100,000 SF turn-of-the-century textile mill
- A huge vacant area that has potential to become a public park new housing

Existing Trees in the South End

- Most of the South End is not successful concerning existing street tree plantings.
- Trees are scattered and do not create a coherent pattern. Choice of tree species is limited to midsize-trees whereas big trees would be a better choice.
- Where existent, many trees are small, unhealthy, and unmaintained.
- Example: The entire section of Main Street in South End



© Jon Bronenkant



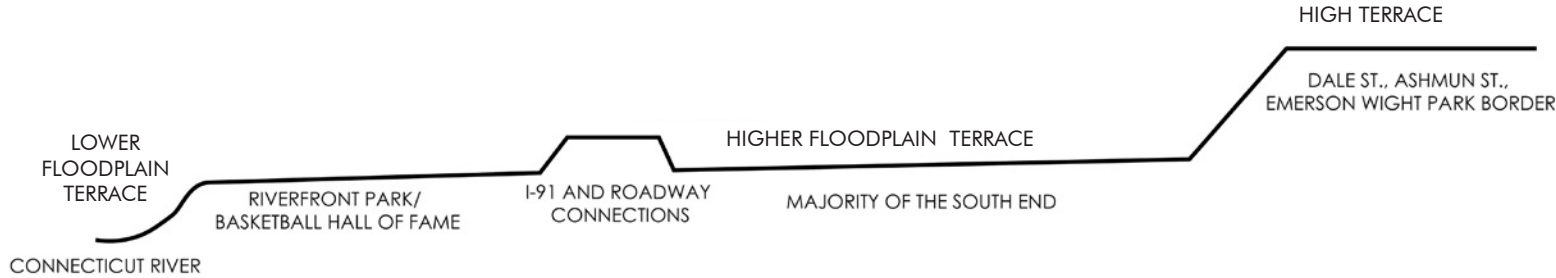
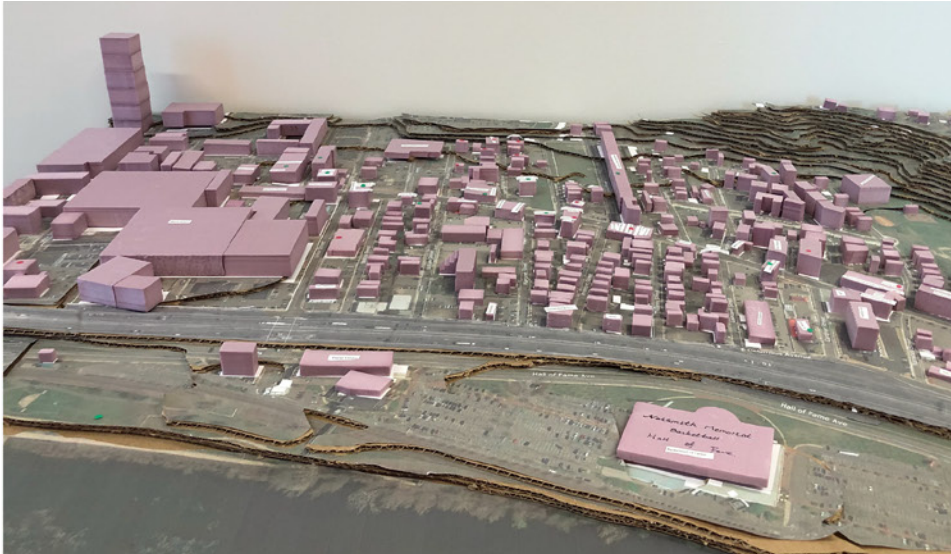
© Jon Bronenkant

Existing Trees in the South End

- Some side streets have more successful street tree plantings.
- These streets have uniform plantings of mature, healthy trees that are maintained.
- Examples include the Outing Park Historic District and some side streets between East Columbus Avenue and Main Street.



Topography in the South End



Section from west to east

- Generally the South End sits on a flat terrace with relatively little grade change.
- Recession of Glacial Lake Hitchcock created this landform. The former embankments of the Lake create a steep slope on the edge of the higher terrace.
- I-91 creates a manmade dam that dissects the float, higher floodplain terrace

Street Hierarchy

- The system of neighborhood streets is dissected by I -91
- Riverfront has limited street access
- Proposed Marble and Ashmun Street Connection will provide more connectivity in the South End

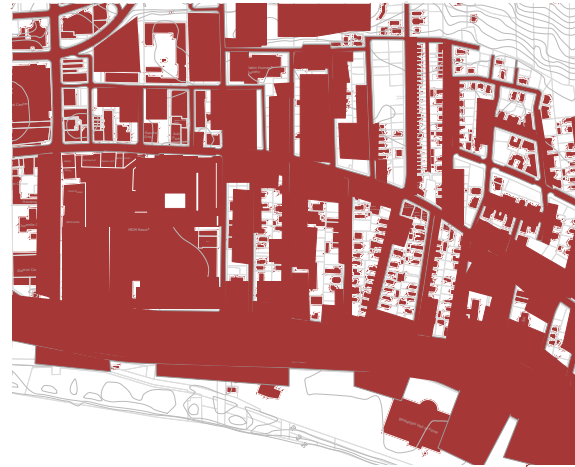
Street Hierarchy

- City Arteries
- Neighborhood Connectors
- Neighborhood Streets
- Interstate
- Crosswalks

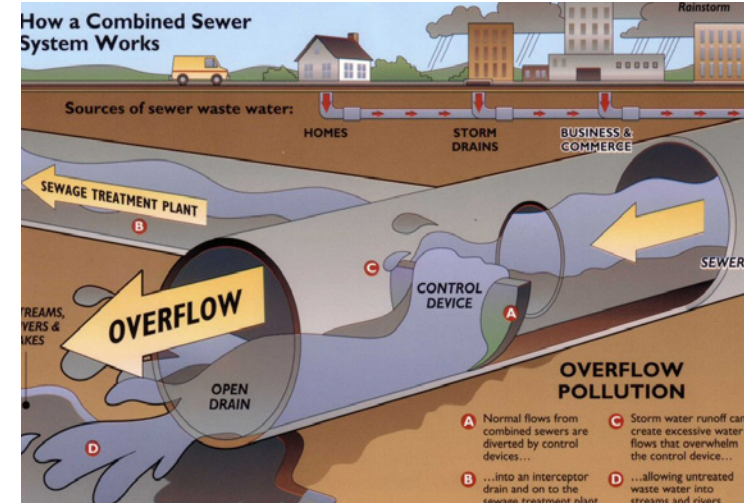


Impervious Surfaces

- The majority of the land is impermeable due to density
- Wide streets and sidewalks increase the amount of impermeable surfaces
- Street Trees are planted in small tree wells that provide little permeability



Combined Sewage Overflows and Stormwater Management



Combined Sewer Overflows are used to carry sewage from homes and businesses to a wastewater treatment plant. During intense storm events, stormwater overflows and combines with wastewater resulting in discharge into a natural body of water.



Stormwater Management can:

- Slow down overland flow
- Allow water to be filtered and cleansed of pollutants
- Stabilize soils on site
- Provide a beautiful way to manage water



Study Models

To better developing the design proposal, each group made a study model for their design in 48 hours.



We went to the Boston and studied urban parks, campus landscapes, greenways and urban markets and creative housing precedents.

Itinerary

Row housing Back Bay
West Canton Community
Gardens
Northeastern University
Roxbury e+ Townhouses
Lawn on D
The Green Fan Pier Park
Rose Kennedy Greenway
North End Park
Hay Market
Government Center Plaza
Commonwealth Avenue



Boston Field Trip

Conclusions

- Improving walkability/bikeability/urban ecology on East & West Columbus Avenue
- Connectivity to the Connecticut Riverfront
- Opportunities for creating diverse open spaces at multiple scales
- Urban ecology and green infrastructure amendments
- Respond to the cultural conditions of the South End, respond to the diversity of existing and future users
- Encourage neighborhood commercial activity: retail & commercial
- Diversify housing options: market rate renting and owner-occupied

Design Proposals Overview



Giving the South End the Right of Way
Christopher Alpay • Rachel Guilfoil • Silke Henstebeck
31 - 42



Growing the South End
Anthony Gemma • Barbara Lampson • Stephen Roach
67 - 78

The South End - A Gateway and a Home
Jon Bronenkant • Karina Ramos-Avila
43 - 54



The Greenscape System in the South End
Hao Fang • Kyle Navarro • Jasmine Su
79 - 101



Filling the Gap
Leanne Blue • Andrew Libby • Genevieve Shepard
55 - 68



Giving the South End the Right of Way

Christopher Alpay • Rachel Guilfoil • Silke Henstebeck

Giving the South End the Right of Way

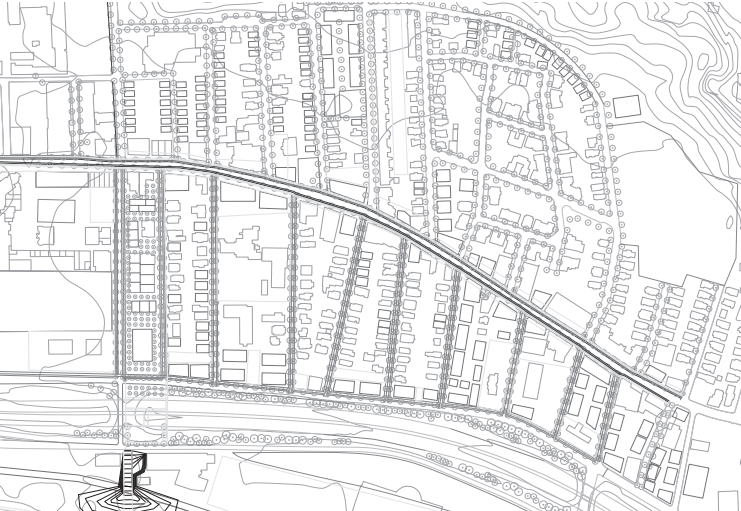
giving the
south end
the
right of
way



Existing Figure Ground



Proposed Figure-Urban Grain



Goals

- 1. Strengthen green and pedestrian framework
- 2. Create opportunities for recreation and education for residents
- 3. Decrease impermeability and improve stormwater management
- 4. Create a diversity of housing types for a diversity of residents
- 5. Increase commercial activity - strengthen local business and create jobs



Giving the South End the Right of Way

The new South End Greenway features multiple opportunities to engage users and to reach our goals of increased recreation, ecological function, and commercial activity. The existing Carl Fisher Sheetmetal building is re-purposed and transformed into retail and dining space.

Other similar buildings are created in order to make the block of Union between Main and East Columbus a lively commercial hub. The existing Pride gas station is retrofitted into an Ecology and Education Center, intended for young children.

Focusing on phytoremediation and stormwater management, the Center provides an opportunity for children to engage with their environment in a fun and educational way. The significant widening of the I-91 Underpass allows the installation of Under I-91 Park, which features basketball courts, a skate park, and a seasonal ice skating rink.

By turning the focus from vehicle to pedestrian, this visionary park changes unusable space into an opportunity for year-round recreation. Finally, our greenway ends with an ADA accessible ramp under the railway that brings people to an overlook and boating dock over the river. This new place takes advantage of the views offered by the river and allows residents and visitors of Springfield to engage with the Connecticut River at the human scale, and encourages recreation through a connection to the Connecticut River Bikeway as well as a dock for kayakers and other boaters.

Christopher Alpay • Rachel Guilfoil • Silke Henstebeck

Under existing conditions, multiple barriers prevent residents and visitors to the South End from reaching the river. Inadequate crosswalks, the absence of bike lanes, high vehicular speeds on East and West Columbus, an underpass under I-91 not suited for neither pedestrians nor cyclists, and the railroad all make it difficult, if not near impossible, for people to enjoy the riverfront.

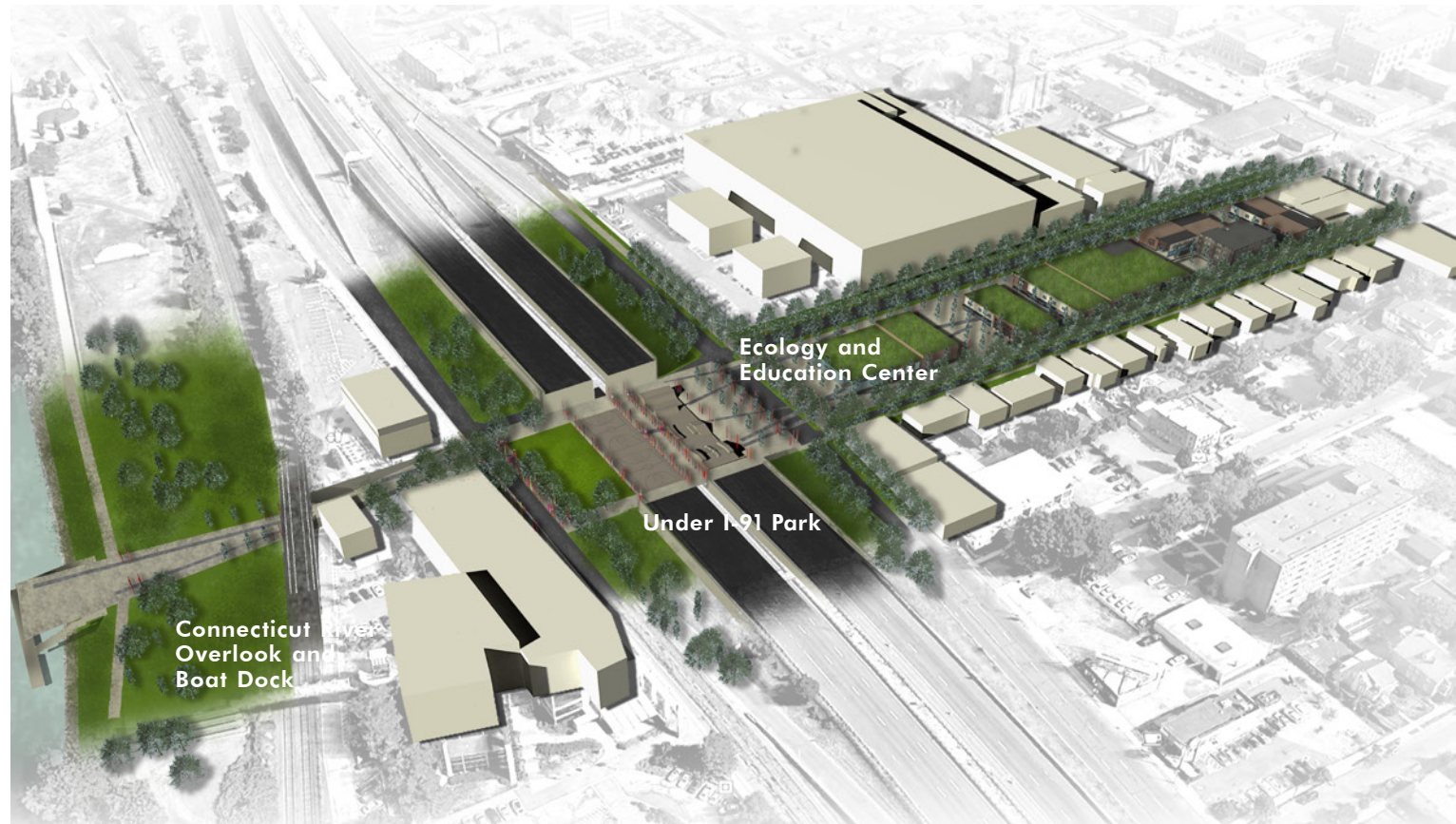
This proposal reduces or eliminates these barriers through interventions at multiple scales. We have increased the number of crosswalks by 17, created bike lanes along all major routes, widened the Union Street Underpass and created a pedestrian/cyclist friendly environment, and designed an overlook and boating dock that provides a destination for the greenway as well as an opportunity for users to interact directly with the Connecticut River.

This design proposal includes other measures that are beneficial for the South End neighborhood. It is proposed to create a diversity of housing options through infill of various housing types including duplexes and apartment buildings.

The new Gemini Village features apartment housing similar to Outing Park, as well as the new Gemini Park. Along all streets, cohesive street tree plantings that include a stormwater infiltration strip are implemented. Main Street has been narrowed in order to reduce vehicular speeds, and a bike lane has been added. Along Main Street, East Columbus, and the Broad Street area, businesses have been infill development in order to increase the economic vitality of the neighborhood.



Giving the South End the Right of Way



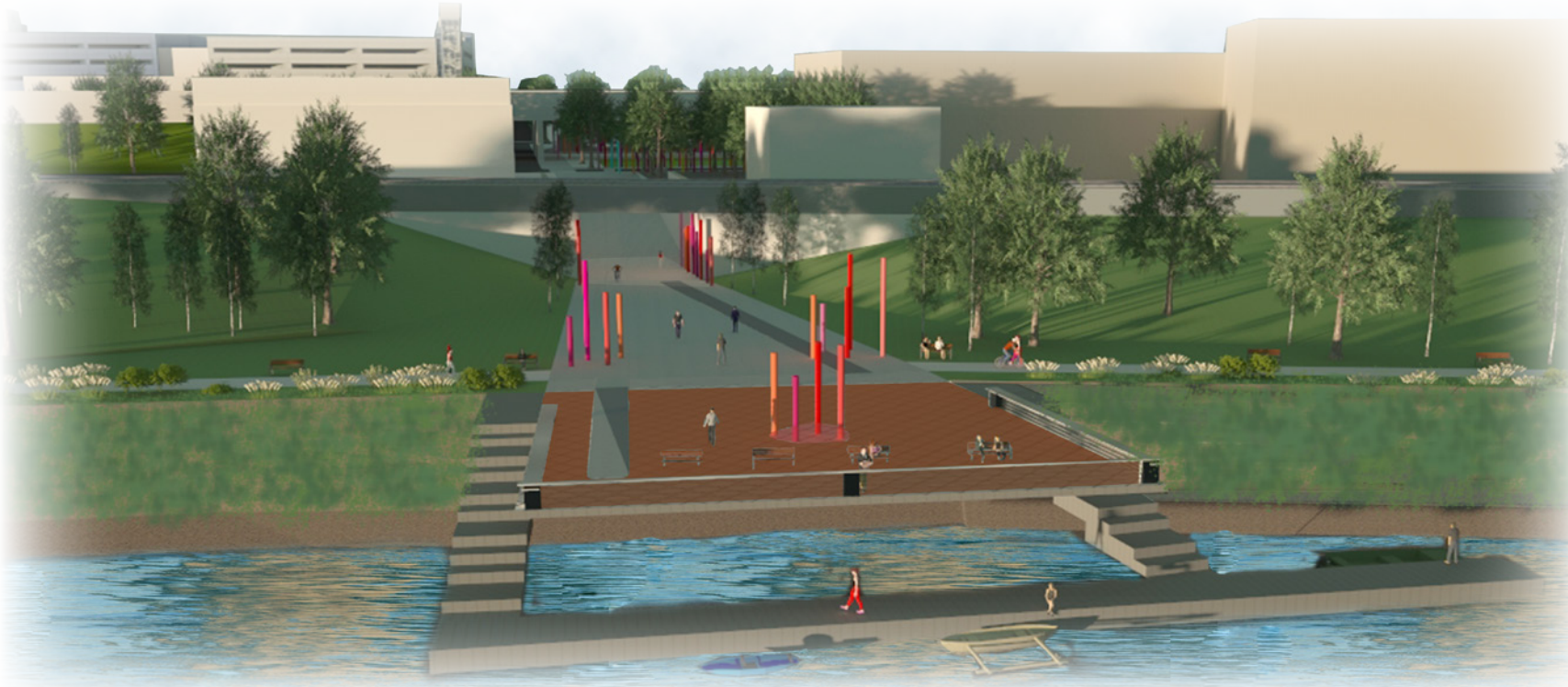
"Giving the South End the Right of Way" fosters walkability, recreation, and green space connections with a focus on making the Connecticut River and Riverfront Park accessible. The South End Greenway creates an axis from east to west along Union and Wilcox street adjacent to the Casino Resort and defines this boundary as a permeable green edge to mitigate the impact of the Casino. The South End Greenway spans from the new dog park at the Dakin Humane Society in the east to a deck and boardwalks on the Connecticut River in the West.



Ecology and Education Center

The Ecology and Education Center is located in what was once a Pride gas station. Gas stations are the epitome of vehicle-centric establishments, and therefore does not belong on the Greenway, which caters to pedestrians and cyclists. This building is retrofitted into the Center, which is designed with family with young children in mind. The theme of the Ecology and Education Center is phytoremediation and storm water management. The character of the gas station is maintained, and used to an advantage by creating a real example of brown field remediation and phytoremediation. This center provides a fun and educational place for families to take their children. It functions as an indoor park, with creative playground structures, as well as many hands-on activities where children can learn about ecology.

Giving the South End the Right of Way



Riverfront Overlook

The overlook and boat dock at the west end of the Greenway provides a destination as well as an opportunity for residents and visitors to the South End to engage with the river. The overlook takes advantage of the views offered by the Connecticut River, and the dock allows people to experience the river on the human scale. Recreation is promoted through the boat dock as well as the connection to the Connecticut River Bikeway. In a city that is far too disconnected from the river that allowed it to establish and grow, this new place reconnects Springfield to an important landmark.



Underpass Park

The Under I-91 Park features opportunities for year-round recreation. In the winter, there is space on West Columbus Green to install a temporary ice skating rink. During other times of the year, this space can be used for festivals, farmers markets, concerts, and other such activities. The bright and colorful lights in the park serve as a place-maker as well as emit light in an otherwise dark space. This makes the area under the highway a place where people and families feel comfortable and want to spend time.

Giving the South End the Right of Way

User Profiles



Luciana - Luciana is a single mom that had lived in the neighborhood for 2 years. She lives in the new Outing Park district and walks her children to school at the South End Middle School every morning. Afterwards she heads to work on Main Street in a new grocery shop and returns to pick them up at the end of the school day. They often head to Emerson Wight park after school to play before heading home for dinner.



Julio - Julio is a single parent with three small children living in a new duplex on Dale Street. In the morning, he drops his youngest off at the daycare on Union Street, sees his middle to the bus stop to head to elementary school, and walks his oldest to South End Middle School. On the weekends, it is easiest for Julio to stay in the South End. In the warm months, he will walk his kids to Riverfront Park by way of the Union Tunnel.



Sheila - Sheila is a recent college graduate who is working in a corporate job at the new MGM Casino. Throughout the week, Sheila works long days and often turns to the nearby restaurants and take out food for her meals. Sheila enjoys running by the river in the early mornings and using the union street connection because it has given easy access to the riverfront park.

Map of People's Routes, Connections and Intersections



Anna - Anna is in her 30's and lives in Chicopee. She recently got a job working in a retail store at MGM. Anna commutes in the morning from Chicopee, stopping at Dunkin Donuts on East Columbus before parking in the MGM Parking Garage. Anna likes to eat her lunch at The Leonardo DaVinci Park, Morris Park, one of the cafe tables on Union, or sometimes even walking to Riverfront Park. After work, she will grab drinks with her co-workers at a bar on Union, inside MGM, or downtown. Anna is working to save up to be able to rent an apartment in the new Gemini Village.



Rosemary - Rosemary is a long time resident of the South End and is currently retired and still resides along Wilcox Street. She walks her dog throughout the neighborhood during the day and makes trips to the grocery store usually twice a week. Karen meets up with friends at the Community Center once a week and also has begun to move some of her meetings with friends to the Union Street green areas that are close to her home.



Stevens Family The Stevens family lives in a single family home in the South End around Broad Street. The family often utilizes the Union Street plazas and new retail area to go out to dinner. They also utilize the Union Street connection to the river to walk their dogs most nights of the week. On the weekends the family utilizes open space in the area including Forest Park.



Todd - Todd is a resident in the new Gemini Village who is employed at a restaurant inside of The MGM Resort. During the week, he walks from his home to MGM by way of La Fiorentina for a vanilla latte. For lunch, Todd walks to Union Street for a sandwich from Union Cafe. On particularly nice days, he takes his sandwich to Morris Park and eats his lunch on a park bench. Otherwise, he will eat inside the cafe. He then returns to MGM until 5, after which he walks home for dinner. He does his grocery shopping at The South End Supermarket in the evening, walking there and then taking the G1 bus home, getting off at the Main/Morris Station.



Brian - Brian is a resident of Westfield. He will often spend weekends at MGM. Brian and his three friends drive to the South End, and check into their hotel off of State Street. They walk to Union Street to grab a quick bite to eat before returning to the hotel to get ready for a night at the Casino. They then walk across the street to MGM and spend the night gambling and having fun before returning to their hotel. The friends sleep in the next day before walking to the Union Sports Bar to spend their Saturday watching college football. When they're full on beer and wings, they return to their hotel and get ready for a Red Hot Chili Peppers concert at the Mass Mutual Center.

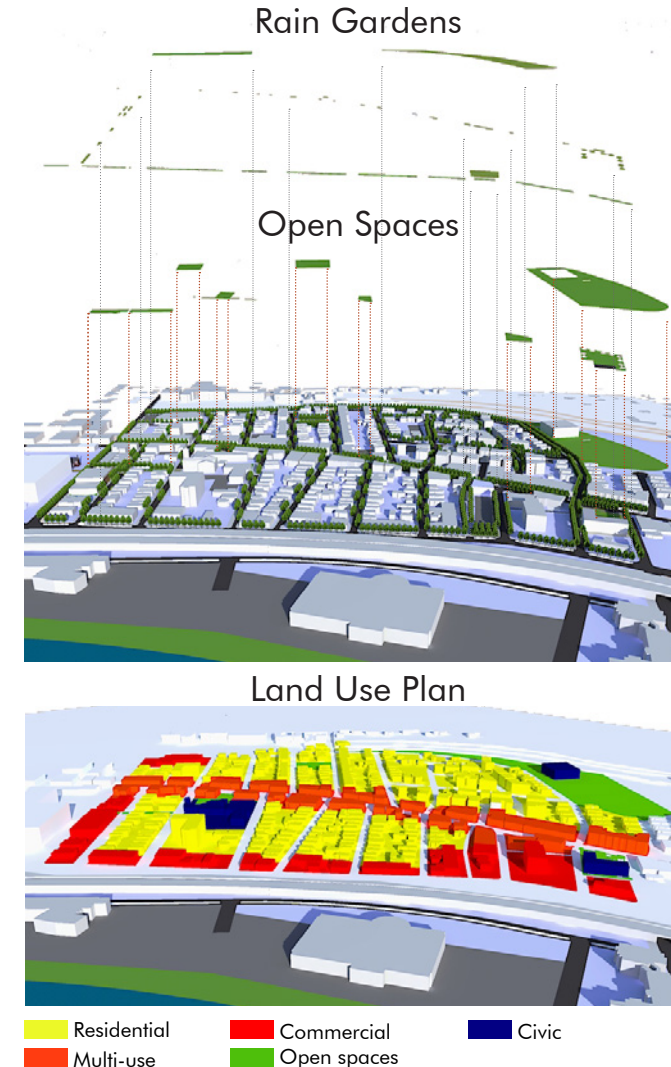


The South End - A Gateway and a Home

Jon Bronenkant • Karina Ramos-Avila

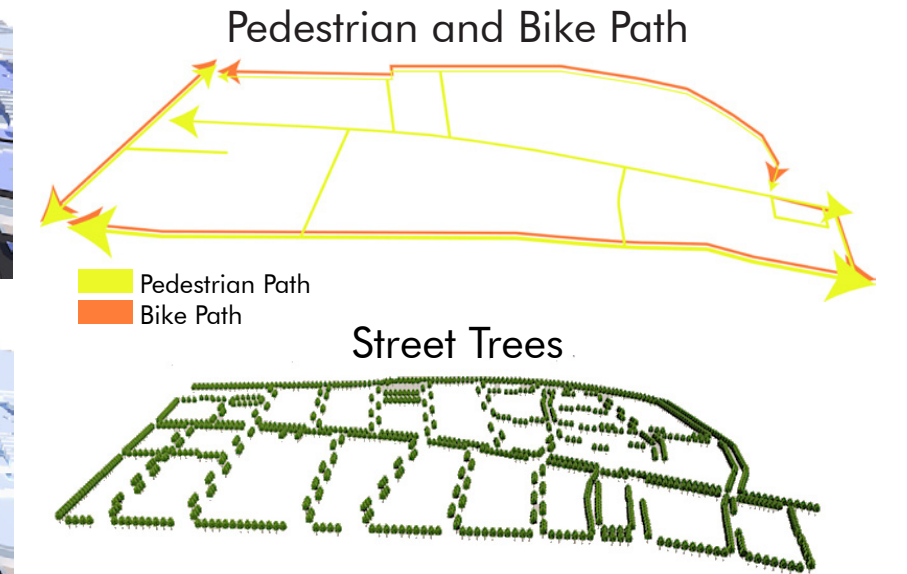
The South End - A Gateway and a Home

The South End - a Gateway and a Home attracts casino visitors to recreational spaces with the use of the Mount Caramel Church Way and the Community Arts Plaza. Mount Caramel Way is a strong axis reaching from the casino to Mount Caramel Church, creating a pedestrian corridor that is off the busy streets. The Community Arts Plaza integrates art to welcome visitors at the intersection of Main and Broad while being a multi-function, multi-seasonal recreation space for residents.



Jon Bronenkant • Karina Ramos-Avila

The bike and pedestrian path connects the South End to all areas in Springfield and connects spaces inside the South End. The open spaces have been designed to be an attraction for residents and visitors. Commercial spaces have been restricted to East Columbus Avenue to encourage local business growth on Main Street.



The South End - A Gateway and a Home

User Profile



She has lived in the same house all her life. She work in the Justice Department downtown. The neighborhood is so much better now and she has lost a lot of weight since started riding her bike to work. She goes down the bike path on E. Columbus to State Street. She goes to the grocery store, and CVS, all on her bike. I joined a bike club in the area, that's where I met my girlfriend. The club meets every Saturday in the informational center, and then they go for training rides along the river. She believes biking improved her life. After church on Sundays she goes up to the bakery and gets a pastry and an espresso and visits her daughter before returning back home.



Retired auto-body worker from the south end. Has always lived in the area, has a deep investment in the community, knowing much of the younger generation. Stills does some car repairs for some people in the community that need them. Loves to sit on his 2nd story porch and have a cup of coffee, watching all the action from above. He also goes to the community center a few times a week to coach Indoor/Outdoor basketball to the youth. He is very invested in the community, and wants to ensure that the younger generations have an opportunity to flourish in the South End just as he had the opportunity.



He gets up at 4 am to start prepping to open his bakery at 6 am. His bakery is at its busiest between 6 am and 10 am. Many nearby residents come by for fresh bread, others like the commuters come to get coffee and a breakfast sandwich. When things slow down, he leaves for lunch to walk around the corner to a pocket park along Main street. He likes to make small talk with people he comes across. He then walks back and waits until close. He then walks upstairs to his apartment to do it all over again the next day. Every other week he drives to the nearest grocery store to get supplies for his bakery such as flour and sugar. Every evening, he walks his dog to the trails in Emerson Wight Park and to the dog park. Heading home, he walks through Main Street to see what events are happening in the pocket parks and the plaza. If it is music that is playing, he sits down to enjoy it.



He lives with his grandmother, he works as event staff for the MGM & Mass-Mutual center. He is very excited about the casino coming in, because it means more work for him as well as many more events on the Main Street. On his days off he watches watches the community concerts the school put. However, he wants to see more of a night life in the South End, but he's worried the night life will just become a high-class expensive luxury that he wouldn't be able to afford. His daily actives include getting coffee along Linear Park before he walks over to the Casino for work. On days off he takes his grandmother for walks along the newly connected riverfront walkway. They walk to Forest Park where they have a picnic before coming back home.



She lives in the subsidized apt complex on William Street. After breakfast she goes outside to sit under a tree to watch the people walk by. She likes to greet her neighbors as they walk by. For lunch, she walks across the street to Frigos, she loves to talk to the owner about the upcoming developments and the current news. After lunch she walks to the plaza on main street to see the events that happen there and occasionally, she buys an ice cream cone from a cart vendor. Once a week she walks to Gemini Park with her daughter to watch her grandson play in the playscape. On Monday's she goes to the community garden to help as much as she can and grabs some herbs for her kitchen.



Living in a Section 8 2-bedroom apartment in Outing Park. Once they moved she got a job at CVS on East Columbus, where she can walk to getting some exercise. She likes that when she comes home at night she can walk down Broad or the bikeway and see the pretty lights in the plaza. Her kids go to the Park pretty much every day after school, either Emerson Wight or the little kids park in Gemini. In the summer after work or on the weekends they go across to the CT bikeway. It used to be really hard to get there with my older son on his bike and the two littler ones in the stroller but now we take the Arlington Bike Way and walk down E. Columbus and still feel safe. They shop at the Aldi on the way back from the Park and then the kids can help carry the groceries.



A complete outsider of the South End, this visitor drives through South End via Columbus Avenue and heads to MGM's parking lot. From there they spend most of the afternoon inside the casino, after a while they decide to go for a walk in MGM's courtyard, getting drawn to the Mount Caramel Church by the Linear Park, they decide to go out in the South End for dinner. Eating at the warehouse, they hear some music playing off by a pocket park on Main Street. They enjoy the music and talk to some locals, where they tell them to take a walk through to the CT Riverwalk. There they take a long stroll along the river walk, before heading back to the MGM garage and head back home.



They live in the row houses with their 2-year old son, 6 year old daughter, and their new infant. The father does construction and the mother works at the Dr. Seuss Museum in downtown Springfield. The mother drops the two kids off at the daycare, and then walks her daughter to the bus every morning. She then waits for the B7 bus that takes her to work. The father picks up the kids from day-care and brings them into town to get a snack, they then go to the playground next to the community garden, before heading home.

The South End - A Gateway and a Home



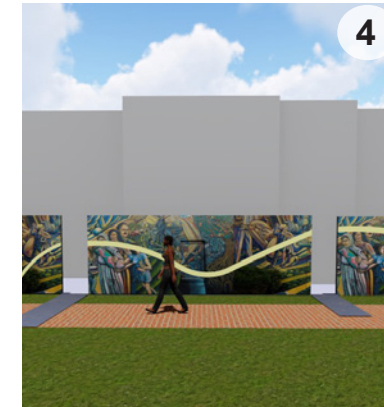
Concrete benches with Rain gardens



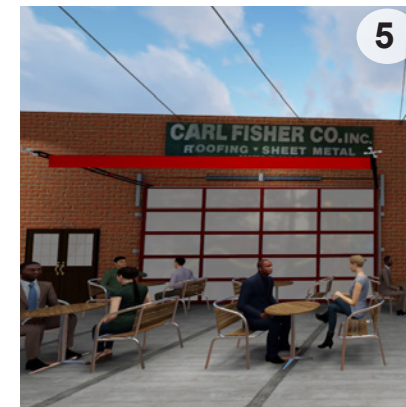
Raised crosswalk with bollards



Alley of Linden trees



Cultural murals with lights



Glass garage doors with outdoor seating



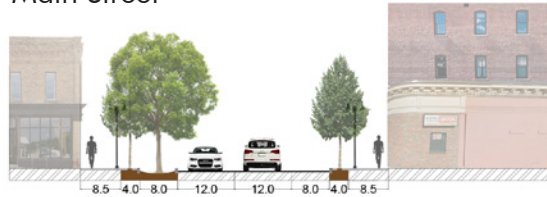
Raised crosswalk over Union St.



The South End - A Gateway and a Home

Street Typologies

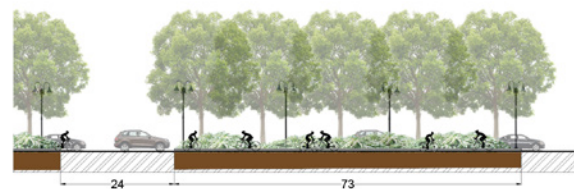
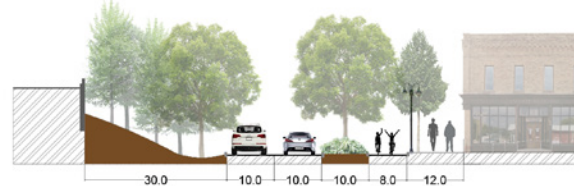
Main Street



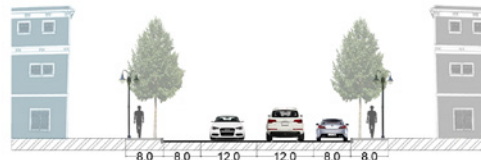
The different street typologies respond to the activity of the streets. The raised crosswalks make it safer for pedestrians to reach attractions in the South End.



East Columbus Avenue



Residential Streets



Jon Bronenkant • Karina Ramos-Avila

Mount Caramel Way

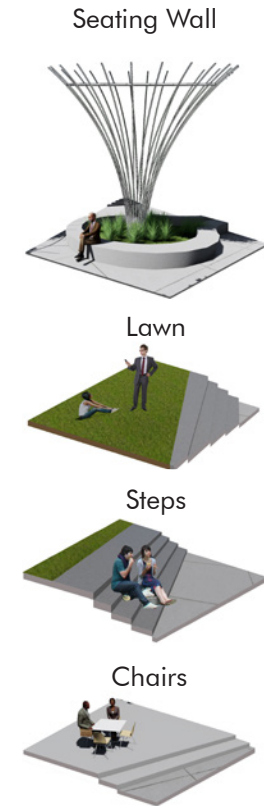
This is a new pedestrian artery that begins at the MGM marketplace, crosses three residential streets and connects to the Mount Caramel Church. The Church is a visual landmark and for many people a strong point of identification. Large raised crosswalks give the priority to the pedestrian, bringing them across Union Street and into the park. Painted murals with strips of lights display diverse art that tells the history of the South End; transitioning between the diverse groups of residence in the South End over its lifetime. Metal strips come out from the murals along the ground and quote important narratives of the South End. Moving from a hardscaped to a grassy park this corridor provides activities for the restaurants, church, residents and visitors of the area. The Mount Caramel Way acts as a corridor, attracting visitors from the MGM Casino, and bringing them into the South End.



The South End - A Gateway and a Home

Jon Bronenkant • Karina Ramos-Avila

Seating Typologies - The Community Arts Plaza



The Community Arts Plaza

The Community Arts Plaza is at the corner of Main Street and Broad Street. The plaza acts as a gateway to the South End for visitors and provides a space for residents to enjoy throughout the year through various activities. The Community Arts Building provides the community with classrooms, art galleries and an outdoor stage which chairs, and tables are available for when not in use. Residents can enjoy the lawn for yoga to ice skating. The trellis design is a piece of art that provides seating, creating numerous seating options for the users. They also contain rain gardens that capture all storm water runoff from the plaza.





FILLING THE GAPS: South End Urban Forest

Leanne Blue • Andrew Libby • Genevieve Shepard

FILLING THE GAPS

South End Urban Forest



1. Removal unsuccessfully placed commercial
2. Integrating parks into the green space system
3. Creating tight knit residential communities
4. Transitional space between MGM and Main Street
5. Little Space System along Main Street
6. Parking behind businesses creating more walk ability
7. Bike/pedestrian path sheltered from vehicular traffic
8. Pedestrian, bike, and emergency only paths
9. New commercial development
10. Additional pedestrian access to the Riverfront

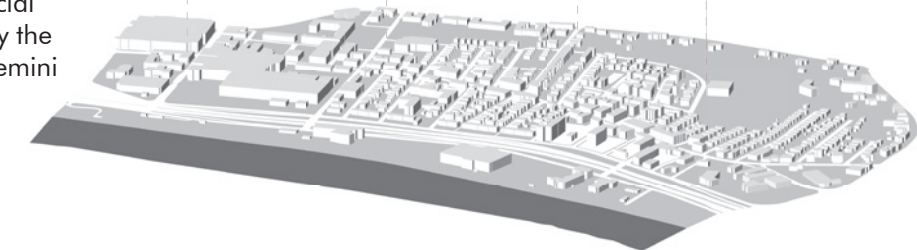
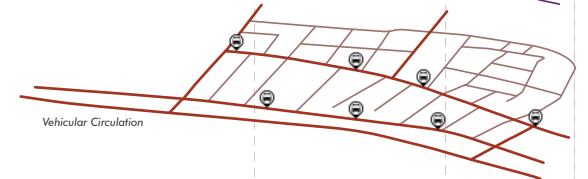
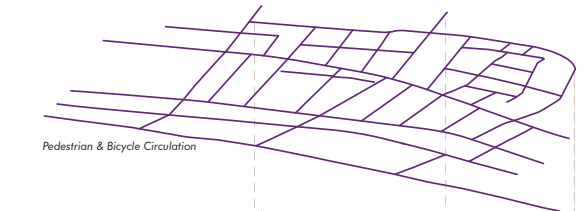
FILLING IN THE GAPS with ecology to create a healthy environment for the community, provide homes for wildlife, and reduce the impermeable surfaces throughout.

REPURPOSING THE GAPS along Main Street by revitalizing underutilized spaces for people to gather and socialize. These spaces will bring culture into the South End by integrating pop-up street art, light displays, and small events all along Main Street.

NETWORKING THE GAPS with pedestrian sidewalks and bike ways to create walkability throughout the South End. Traffic calming methods including narrow streets, vegetative edges, and bump outs are throughout to create a safe environment for pedestrians.

CONNECTING THE GAPS by revitalizing Main Street businesses and creating communities. Residential areas west of Main Street are now condensed and buffered from the high traffic volume on East Columbus and the commercial areas. To the east, a residential community is created by the size reduction of blocks and a new park. The former Gemini site now is comprised of single and duplex housing.

Creating a walkable city promotes a vibrant and active community thought out the South End.



FILLING THE GAPS: South End Urban Forest

Green Connections

Union Street is an important connection for both East Columbus Avenue and Main Street. It is the threshold between the larger commercial businesses on East Columbus Avenue and the small scale family businesses on Main Street. Both residents and visitors alike enjoy Union Park, which provides seating and dining for local businesses and a refuge from the hectic atmosphere of MGM Resort Casino. This park is a preview to the network of little spaces along Main Street.

The abundance of trees which line Union Street and Wilcox Street help to walk to East Columbus and Main. The trees protect and screen the residential area that line Wilcox Street. The MGM Resort Casino provides the largest area of a green roof and wall in the vegetative infrastructure system. These green systems provide opportunities to clean the air and water, create a visual interest and help reduce noise.



Ecological Systems

The new ecological systems of the South End create a healthy environment for the community, provide homes for wildlife, and reduce the impermeable surfaces throughout. The residential swales, infiltration basins and forested buffers create edges through the area, provide storm water management with a focus on collecting and storing water on-site. Little spaces, bike ways and the new pedestrian underpass altogether create a coherent network system of green spaces. They promote gathering while also sheltering pedestrians from the busy vehicular traffic. Throughout the site, green roofs and walls provide other means of collecting water and implementing another level of ecology in a visually appealing way.

Residential Swales



Infiltration Basin



Little Spaces



Bike way



Street tree planting



Green Walls & Roofs



Forested Buffer



Pedestrian Underpass



Ecology & Commercial

The newly developed commercial strip along East Columbus Avenue creates a strong street edge while providing the citizens with a designated area to shop for a variety of needs.

This area is separated from the residential district by a dense forest that brings some of the much needed trees into the area. These trees clean the air and water, create a visual buffer, help reduce noise, and provide a habitat for wildlife.

To help protect the residential area, Fremont and Loring Streets were converted into dead ends that are only accessible by pedestrians, cyclists, and emergency vehicles. This will reduce traffic in the residential area and promote a closer community.

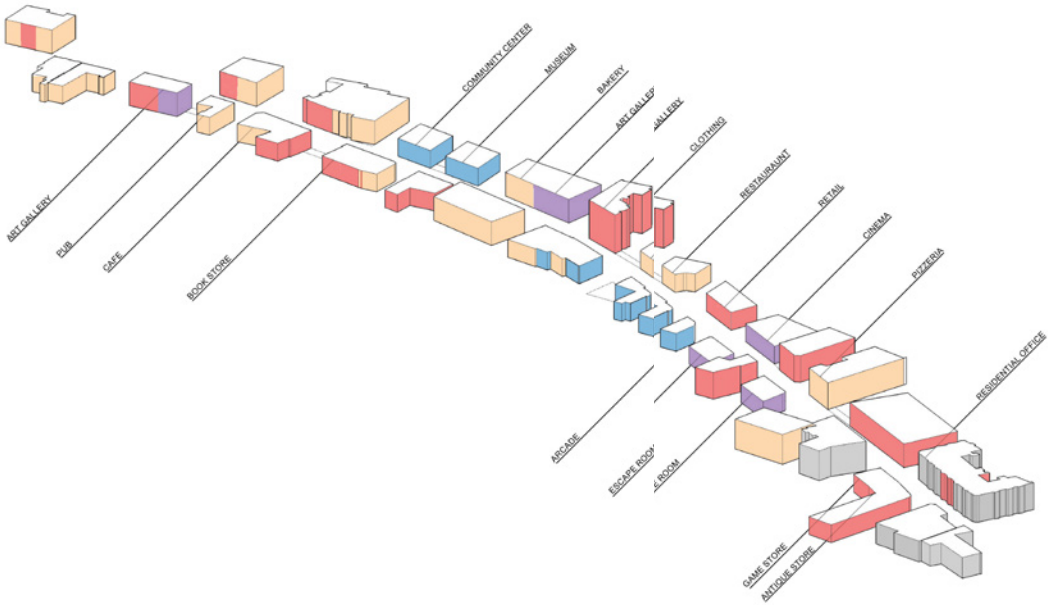
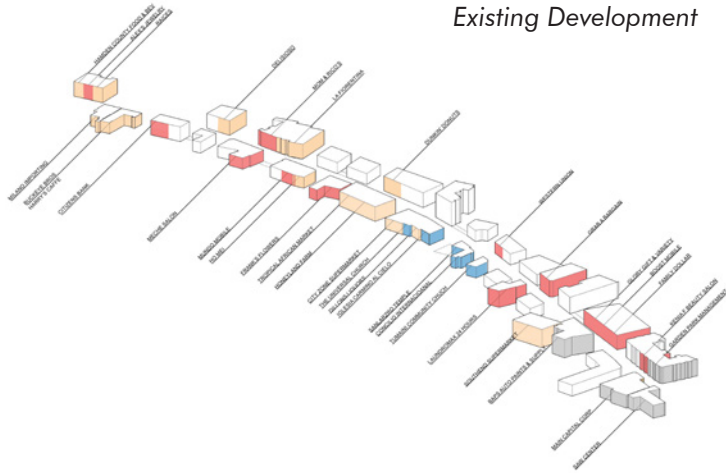
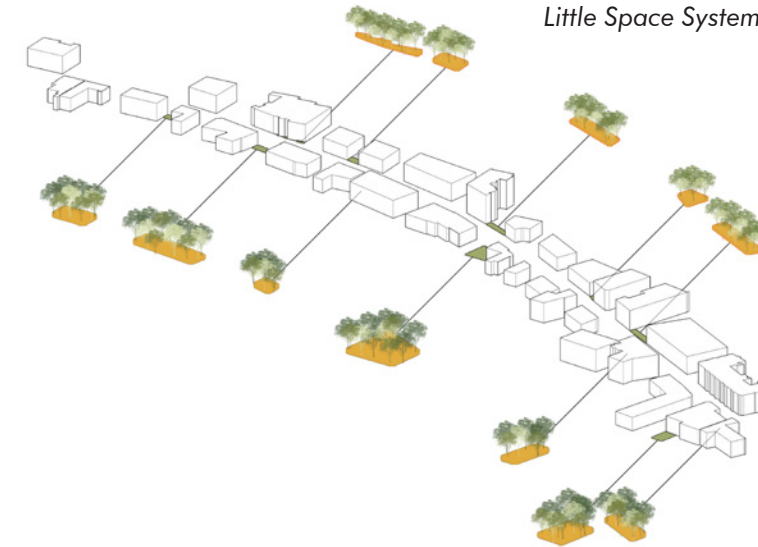
A highly vegetated strip runs along East Columbus to shelter the pedestrian and bicycle path from the heavy traffic off Interstate 91. This path is part of a network connecting Union and Main street to green spaces. A newing created pedestrian and bicycle underpass provides additional access to Riverfront Park.



FILLING THE GAPS: South End Urban Forest

Little Spaces of Main Street

Promoting walkability and connectivity throughout the South End and specifically Main Street is a primary goal. Traffic calming methods including vegetative edges and bump outs to create a safe environment for pedestrians. Widened sidewalks create space for businesses to expand outwards and give bicycle riders protection from the vehicular circulation. The street trees that line Main Street define an edge and highlight the pedestrian corridors that connect to the entire South End. Similar to the Forested Buffer behind East Columbus Avenue, the dense forest along the backside of Main Street cleans the air and water, creates a visual buffer, and helps reduce noise, creating a safer residential community.



Main Street becomes an established chain of vegetative spaces created from otherwise underutilized areas. These small spaces draw people down through the entirety of Main Street adding a lively culture to the downtown experience by integrating pop-up street art, light displays, food vendors and space for outdoor events and markets.



User Profiles



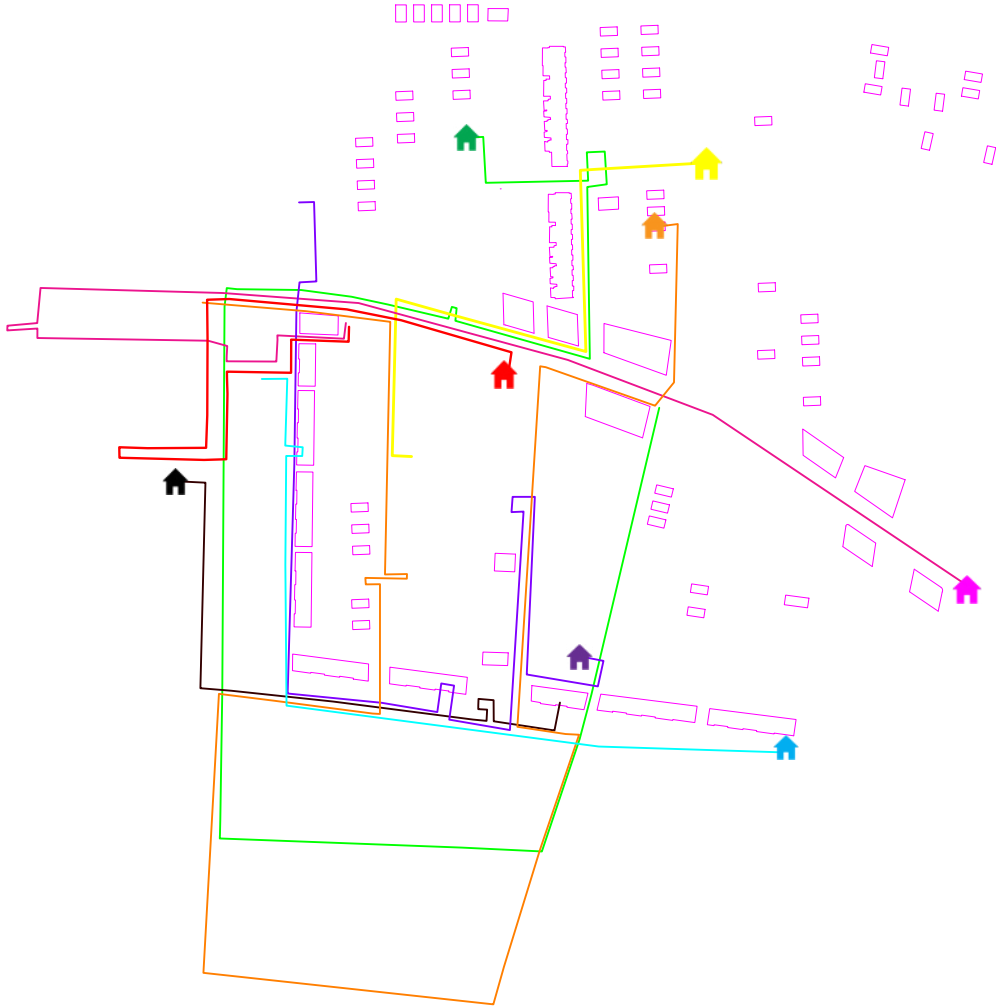
Brian, 52, is a local police officer who patrols the South End of Springfield during the later parts of the day and into the evening. He runs radar on East Columbus because it is the most trafficked area. However, the traffic on this road has slowed down recently due to the heavy planting of trees on either side of the road and the medians for pedestrian crossing. During his break, he walks up Wilcox Street toward the Union Park. On his way there, he strolls along the heavily planted walking path and then grabs a sandwich at one of the sub shops along Wilcox.



Betty, 76, lives in the new row houses along Winthrop Street. On nice days, she strolls over to the Gemini Park to feed the birds and to enjoy the fresh air. After some time in the park, Betty goes to Our Lady Mount Carmel Church on Williams Street to volunteer. On her way there, she walks along Main Street and says hi to a couple friends who she sees spending time in one of the small parks.



Sandy, a 45 year old lady, works at MGM and, though she lives in East Longmeadow, Sandy is able to take the G2 bus from her home right down through Main Street of the South End of Springfield. She gets off at stop 1545 in front of Dunkin Donuts along Main Street and takes time to stroll down Main Street before work. Walking down Main Street, she admires the beautiful art painted on the walls in the small pocket parks and enjoys the shade that the street trees provide.



Victor, a 63-year-old visitor to the MGM Casino, loves Starbucks coffee and discovered that there was one on East Columbus Avenue. He heads down there by the greenway park along Union Street. Along the path, he bumps into a friend he made the night before and they begin to chat underneath the canopy of the birch trees. Once he gets his coffee, he decides to venture further down East Columbus. He discovers some shops he loves to shop at and spends several hours in this retail strip.



Claire, 32, and her family live at the end of Freemont Street and enjoys the secluded area of the dead-end street. A forested strip lies between Claire's house and the retail strip that lines East Columbus Avenue giving her a buffer from the busy environment that flows along East Columbus. In the morning, Claire walks with her two sons over to the South End Middle School one street over. She drops her twelve-year-old son off for school and then heads back down the street to shop at the various shops on East Columbus. Afterwards, she heads down Wilcox Street to continue shopping before going to the daycare to drop her other son off. After she drops her son off, Claire then heads to her job at Meche Salon.



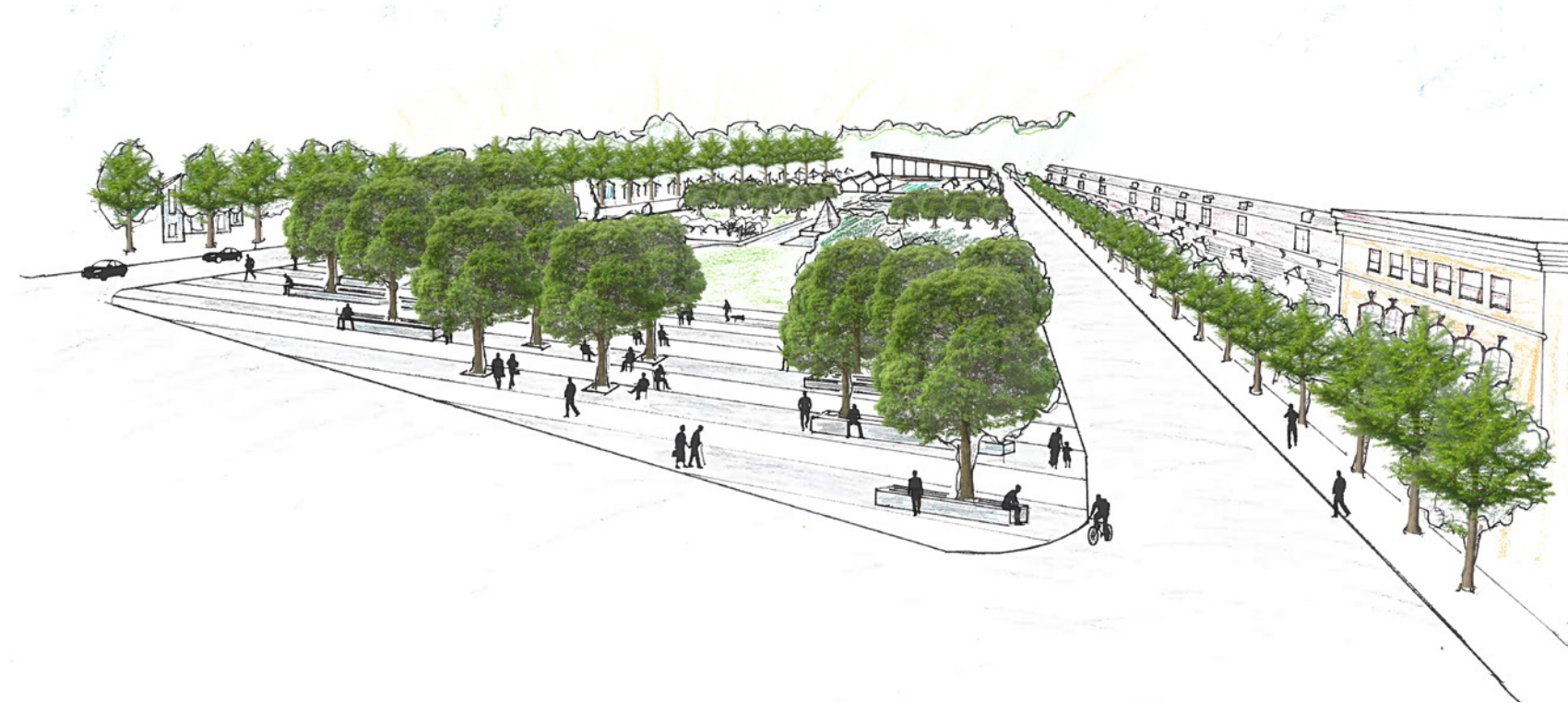
Jordon, a 18 year old boy, lives on the corner of Winthrop Street and the new connecting road, Gemini Street. Jordon goes to Gemini Park on a regular basis to play basketball on the new courts with his friends. After playing for a while, they make their way down to La Fiorentina to grab a bite to eat. Once they finish, Jordon heads down Union Street to continue his workout at LA Fitness. Heading back home he walks through the pedestrian/ bike underpass and continues through Freemont Street by way of the green connection between the retail stores.



Robert, 25, lives in one of the residential units above an Italian Restaurant on Main Street. On the weekends for dinner he goes downstairs to the restaurant to grab a bite to eat. When it's nice outside, he takes his dinner out to the restaurant patio and sits underneath the soft glow of the string lights. After he finishes, he decides to walk down Main Street toward MGM to do some gambling with friends. At the end of the night, Robert and his friends head back home. They take the park trail that connects them to one of the many small parks along Main Street. After spending some time in the park, he heads home by the light of Main Street.



Ashley, 39, lives with her thirteen-year-old daughter on the beautifully planted Central Street. On the weekends, they take their bikes and ride down toward Riverfront bike way. Along the way they travel down the quiet Freemont Street and across East Columbus Avenue to go through the brightly lit pedestrian/bike underpass. This leads them out in front of the Basketball Hall of Fame and a trail connects them up to the Bikeway. After spending some time biking, they decide to turn around and go to Frigo's market to grab a sandwich. Once they finish their sandwiches, they head across the street to visit Ashely's grandmother in the elderly home to catch up on life. After their visit, they head back home by Main Street.



Growing The South End

Anthony Gemma • Barbara Lampson • Stephen Roach

Anthony Gemma • Barbara Lampson • Stephen Roach

GROWING THE SOUTH END



“Growing The South End” envisions Springfield’s South End neighborhood as a vibrant urban residential and commercial center anchored by the new MGM Casino Resort to the north, with strong new connections to the Connecticut riverfront to the west and a new residential identity core surrounding the Gemini site.

Bike and Pedestrian Network

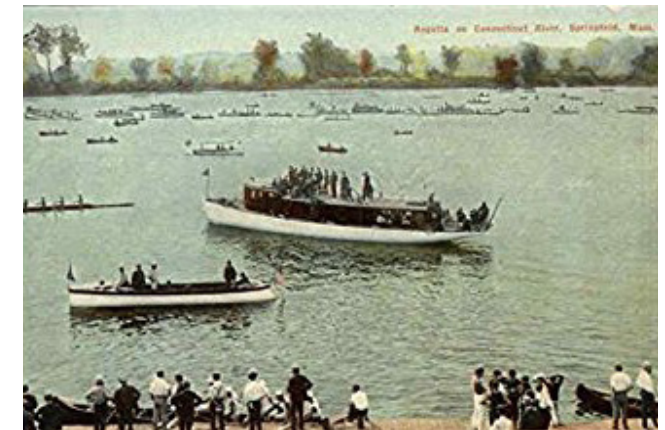


Green Space and Stormwater System



Our multi-layered approach to the design incorporated different housing typologies accessible at different income levels, and storm-water management and phytoremediation techniques woven into expanded recreational offerings to provide a cleaner and healthier neighborhood for residents and visitors overall. The core of the main residential area has been re-imagined at the site of the former Gemini brownfield as a neighborhood center that incorporates a community learning center focused on urban agriculture at one end gradually transforming towards the west into an urban park and open plaza on Main Street that can be used for pop-up events such as farmers’ markets, and food truck festivals.

Our early exploration of the neighborhood’s history made it clear how important the connection to the riverfront was for the community. This was reinforced by conversations we had with residents who lived in the neighborhood prior to the construction of the I-91. This remnant of urban renewal and the expansion of the automobile was shown as a clear motivator of the neighborhood’s downside over the course of the last 50 years. It also showed that the two largest environmental assets of the neighborhood were both the proximity to the Connecticut River, and the adjacency to the downtown area - so strengthening these connections became a strong priority.



Anthony Gemma • Barbara Lampson • Stephen Roach

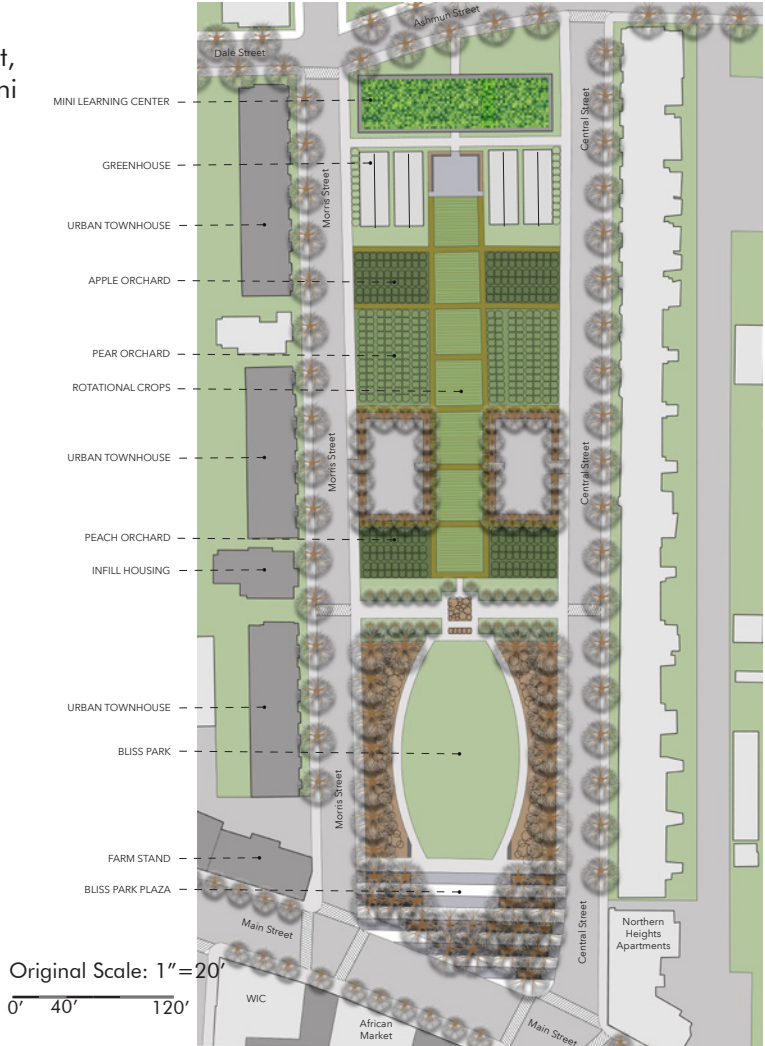
Growing The South End

The Gemini brownfield site was re-imagined to give the neighborhood a strong and positive new visual identity. In the east, adjacent to Ashmun Street, an educational center called the Gemini Learning Center focuses on urban agriculture as a springboard for classes in life enrichment and job-training skills for adults and teens, as well as after-school and weekend classes for children in urban agriculture and healthy living.



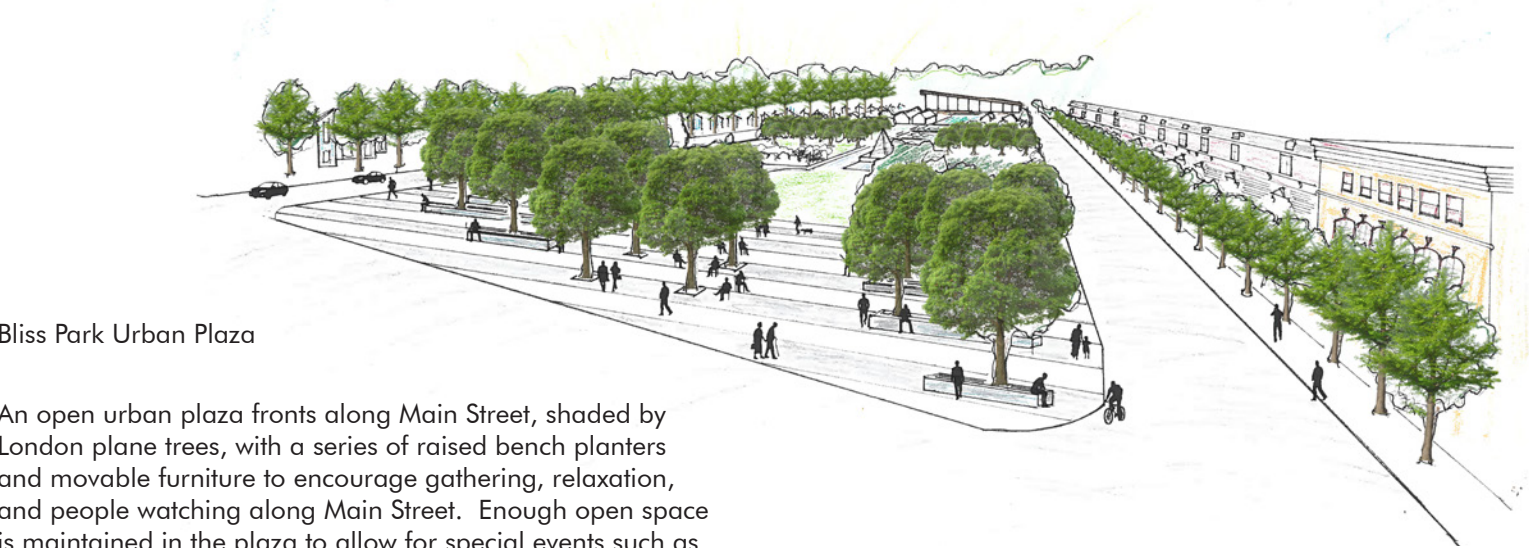
Proposed Land Use

The proposed changes to the land use diagram were made in an effort to strengthen the continuity of the residential areas, create a more vibrant and unified Main Street and better access to open green space. The Gemini Site was developed to offer both green space and neighborhood-centric commercial and civic activities.



Gemini Learning Center and Bliss Park

An urban agriculture growing center unfurls towards the west with extensive growing plots, orchards, and greenhouses. As you move through the site westward it gradually transforms into a classic urban park inspired by historic urban square green spaces such as Boston’s Louisburg Square. With row-houses on both sides and a classic view-through access, a new legible residential identity is created, giving the neighborhood something to identify with and be proud of while enhancing the value of surrounding properties to encourage residential developers.



Bliss Park Urban Plaza

An open urban plaza fronts along Main Street, shaded by London plane trees, with a series of raised bench planters and movable furniture to encourage gathering, relaxation, and people watching along Main Street. Enough open space is maintained in the plaza to allow for special events such as farmers’ markets and food truck events.



Urban Town homes along the Arlington Bike Way

Our vision for housing in the South End can be laid out in four parts: First, downtown loft-style residences have been incorporated into new and restored commercial buildings along Main Street and close to downtown. These residences have green roofs to manage storm water, and represent the market-rate residences at the higher end of the cost spectrum. Single-family urban townhouses and detached bungalow court style dwellings are developed to offer reasonably priced market-rate housing in the neighborhood. These typologies are aimed at residents looking to make the jump from renting to owning who may not otherwise be able to afford to do so. Finally, detached single family dwellings are to be developed on an infill basis, removing vacant lots from the urban grain and creating an increase in the availability of both low-income and market rate housing.

This plan and section illustrate one of our target areas for housing development. Situated along the newly proposed Arlington Bike Way and next to an exciting new restaurant development and pocket park on Main Street, these residences illustrate two of our proposed housing typologies: the detached single family dwelling as well as the urban townhouse development. Totalling seven units, these residences take the place of two run down duplex units that were isolated by commercial activity and in danger of becoming vacant lots. Green building practices, such as green roofs on the townhouses and a shared driveway between the two houses, are implemented to promote sustainable lifestyles and keep ownership costs down. We encourage using simple, locally sourced building materials, compact building floor plans, and small lot sizes to keep development costs as low as possible. To limit the amount of resources going to the automobile, alternative parking practices will be used where residents are permitted to park in commercial lots during non-business hours.



Plan of Urban Town homes along the Arlington Bike Way

Original Scale: 1"=20'

0' 40' 120'



Section through Urban Town homes along the Arlington Bike Way

Our built environment can promote a healthy lifestyle for all. Every residence is given outdoor private space and planting beds for small scale agriculture.



New Boulevards, South End Underbridge, Naismith Park, and new connections to the Riverfront

Removing the I-91 ramps from East Columbus and Hall of Fame Avenue allowed space for the creation of tree-lined boulevards that calm traffic and provide better bicycle and pedestrian access. The additional width gained from this is used to create a boulevard structure for both streets that incorporates two one-way traffic lanes, a 12' wide two-directional bike lane on both streets, and extensive tree plantings on both sides of the street as well as in a planted median on East Columbus that buffers the bike lane and provides space for bus shelters. Wider sidewalks along East Columbus, with parking located wherever possible behind the streetscape buildings de-emphasizes the automobile, and allows for a walkable streetscape. Dropping the railroad below grade connects the neighborhood even more firmly back to the river, by allowing four new pathway connectors from Naismith Park to the Connecticut Riverfront Park and Bikeway.

Naismith Park includes new recreational opportunities that contribute to the neighborhood and refer to basketball - a game that was invented in Springfield. New basketball youth-scale half-courts are placed to the north of the Basketball Hall of Fame. A basketball "shooting cage" on the south side of the Hall of Fame allows up to four groups to practice skills at one time, completing the original mission of James Naismith to provide accessible recreation for youth on a year-round basis. Dropping the railroad below grade created the possibility of multiple access points to the River, and creating a large plaza underneath the I-91 between Fremont and Loring creates the South End Underbridge, a multi-use space with urban skate-park that connects the neighborhood to the river area. Site-lines now run all the way from Main street down both Loring and Fremont through the Underbridge to the new Naismith Park and Basketball Hall of Fame. Stormwater management and phytoremediation were a priority in this design. A phytoremediation system designed into the banks of the freeway acts as passive irrigation for an urban forest buffer, and reduces road salts and other runoff pollution. Taller plants filter airborne pollutants before they can reach the neighborhood, improving air quality. Stormwater management includes use of green roof technology throughout the neighborhood. Excess runoff is directed through a glass "river" in the floor of the Underbridge and lit by LED lighting that is hydro-electrically powered by the flow of stormwater through the system. This flow is then directed to a series of rain gardens in Naismith Park, and in the parking lots for the Hall of Fame area. This new park surrounding the Basketball Hall of Fame includes permeable pathways and boardwalks to lead pedestrians and bicyclists through the rain gardens, with wayfinding to explain the hydrology and elements of the stormwater management system.



Section through I-91 showing phytoremediation

Growing The South End



Louie
Justice Department Employee
55
I live on Lombard where I've lived all my life. I live in the house I grew up in with my mother who's getting older. I ride my bike to work now- I work in the Justice Department downtown and they offered an incentive for healthy habits, and since my doctor told me I was at risk for cardiovascular disease, I decided to make some changes. I bike to work along the East Columbus bike path. After work, three days a week I head down State Street to the Riverfront Park, and ride along the Bikeway to Forest Park, around and back to Riverfront Park and home through the Underbridge. On the weekends I ride with a bike group that meets at the Underbridge and then we go on different training rides. In fact, I met my girlfriend at one of those meet ups. On Saturdays, after my ride I like to walk to the bar at the Union Market, where I get a beer and something to eat and watch a college football game for awhile.



Dora
Grandmother
77
I live in one of the new row houses on Richelieu Street. Every Saturday morning in the summer I leave my home and walk across the street to work in the community garden for a couple hours. After that I walk over to Emerson Wight Park to see my grandsons little league game. Then we catch a bus to his favorite pizza restaurant, Red Rose. We walk back along Main to work off the heavy lunch and I take him over to the playground across the street from Bliss Park. Once he is done playing I am ready for my afternoon nap, so his mother picks him up I walk back home to Richelieu Street. In the other parts of the year I still work in the garden a lot in the morning, but then I go volunteer at the Library 3 days a week shelving books. Then I take the elder yoga class at the Education Center and walk to the end of the Bliss Park to meet my grandson when he comes in from the Walking School Bus.



Brian
Father
35
Brian's son, Connor, is crazy about basketball so for his birthday he plans a trip to the Basketball Hall of Fame. On Friday they drive in from Connecticut, grab some dinner at the Chipotle off East Columbus and then check into the Hilton on West Columbus. After they eat dinner they take the kids to Cold Stone Creamery near the hotel, and go for a walk along the Hall of Fame promenade which is really beautiful even at night. They see something going on across the street and head over to the Underbridge where there is a performance art festival: they see people on stilts eating fire, an LED light show in the Underbridge, and music. They find out that in half an hour there is a fireworks display over the Connecticut River so they decide to enjoy the night walking along the river. Then they walk back to the Hilton along the Riverfront Bikeway which is easy and safe to navigate at night thanks to improved lighting fixtures. They cross the train tracks at the trail entrance in front of the hotel and turn in for the evening.



Rosaria
Mother
26
We live in the Outing Park Historic District, and I work at CVS on East Columbus. My doctor told me to get more exercise because I'm diabetic, so I've been trying to walk to work. I've lost 20 lbs and I feel like I have more energy. I walk down Dwight Street to Marble Street, then along Main to the Arlington Bikeway, right on East Columbus to the corner of William and East Columbus, where the CVS is. Often I go to the Aldi on East Columbus on my way home. Sometimes my mother brings the kids to meet me after work and we go over to the Underbridge so the kids can skateboard before we go home, or we stop at Chipotle near the carwash for dinner. Then we walk my mom to the bus stop at the corner of Broad and East Columbus so she can go home to my dad, and we walk home from there.



Gabe
Gentleman of leisure
41
Gabe is a chemical engineer with a bit of money to burn. Looking for a night of fun, Gabe drives west on I-91 from Wellesley to Springfield. After getting off the highway, he checks into the Hampton Inn on East Columbus Street, then gets tidied up and walks down East Columbus to the MGM Casino to hit the slots. After an hour of slots and a couple of drinks Gabe decides to cash out and head across the street to check the Union Street Market that the concierge at the Hampton recommended to him. After finishing his meal he pops into the sports bar located at one corner of the market. While watching the Red Sox game, he makes the acquaintance of a nice woman sitting next to him at the bar. They chat for a while before making plans to get coffee at a place on Main Street and walk the Riverfront Park the next day. Pleased after a fun evening out, Gabe walks back to his hotel and heads to bed.



The Greenscape System in the South End

Hao Fang • Kyle Navarro • Jasmine Su

The Greenscape System in the South End

Making the South End a greener area while maintaining its urban infrastructure is the goal of this proposal. This is accomplished through creating a network of green spaces that connects to each other all around the South End. People can walk all around the South End and explore different green areas like the Riverfront, urban squares, pocket parks, the Connecticut Riverwalk and Bike Way and the new storm water park on the former York Street jail site. These parks are not only attractive and interactive, but will clean out runoff storm water coming from streets and highways. Since Springfield has a problem with combined sewer overflow and dump the overflow in the Connecticut River, it is necessary to reduce the amount of CSO's through incorporation of more green spaces with swales and storm water parks that clean out the water before entering the River.

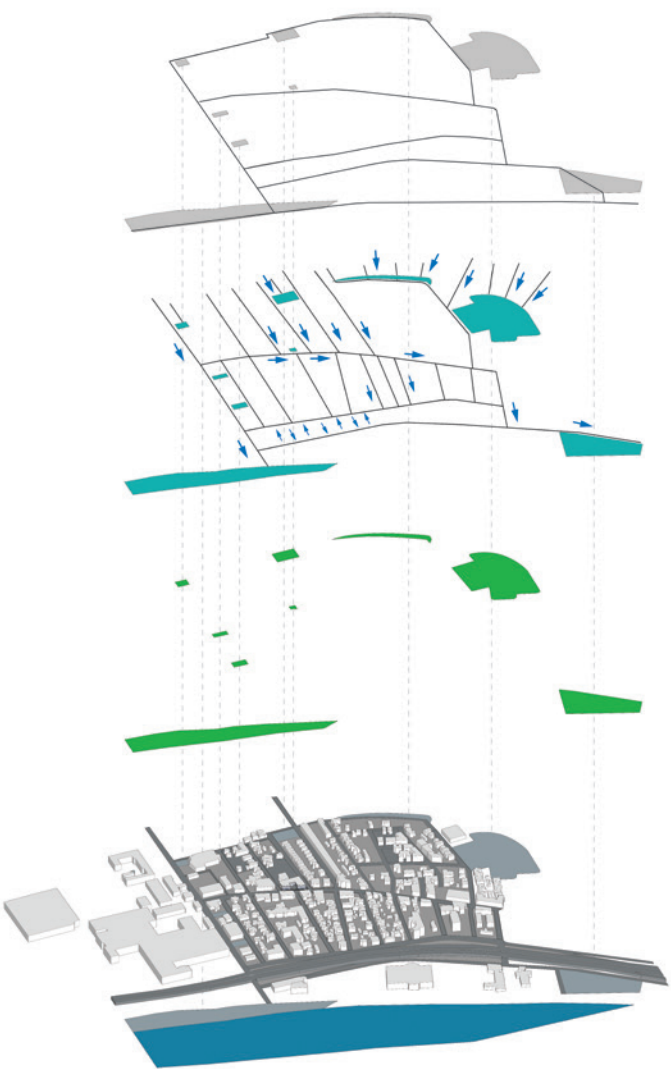


Existing

- 1 MGM Resort
- 2 Riverfront Park
- 3 Emerson Wight Park
- 4 Basketball Hall of Fame
- 5 Connecticut River Walk and Bike way
- 6 Train Track

Propose

- 1 Gemini Square
- 2 Ashmun Green way
- 3 West York Storm water Park
- 4 Dog Park
- 5 Neighborhood Green Walkway
- 6 Main Street Pocket Park



The existing topography of the South End supports the flow of storm water from east to the west and eventually into the Connecticut River. Designate bike path & pedestrian walk circulation (Major Open Space Connection)

Storm water diagram

Major open spaces

Diagram of Green-Blue system - Planting and Stormwater management

The Greenscape System in the South End

Green way Renovation

Main Street

(Narrow situation)

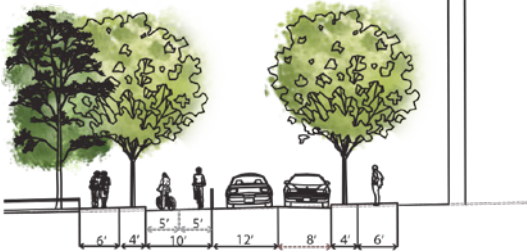
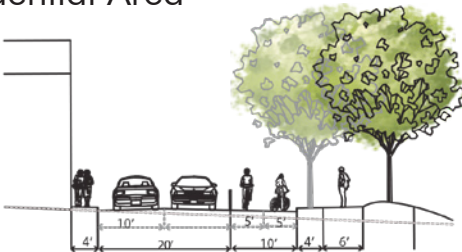


(Wide situation)

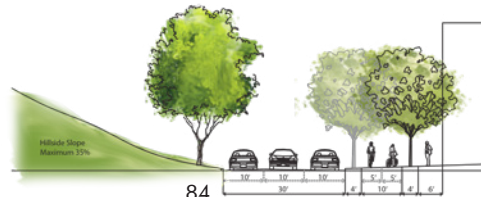
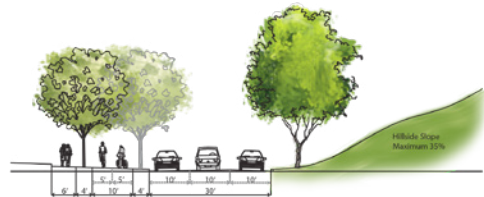


The Greenscape System renovates all primary street connections. The designated bike lanes are either separated by planting of trees or physical fencing. People biking should not worry about the vehicle. Extended sidewalks provide a better and safer walking experience.

Residential Area



East/West Columbus Ave



Proposed Land Uses

Mixed-use:

Mixed-use buildings are proposed on Main Street. On the ground floor commercial uses like retail, restaurants or bars add vibrancy and life to the street. On the first and second floor market-rate apartments are proposed. These mixed use buildings are interspersed with pocket parks.

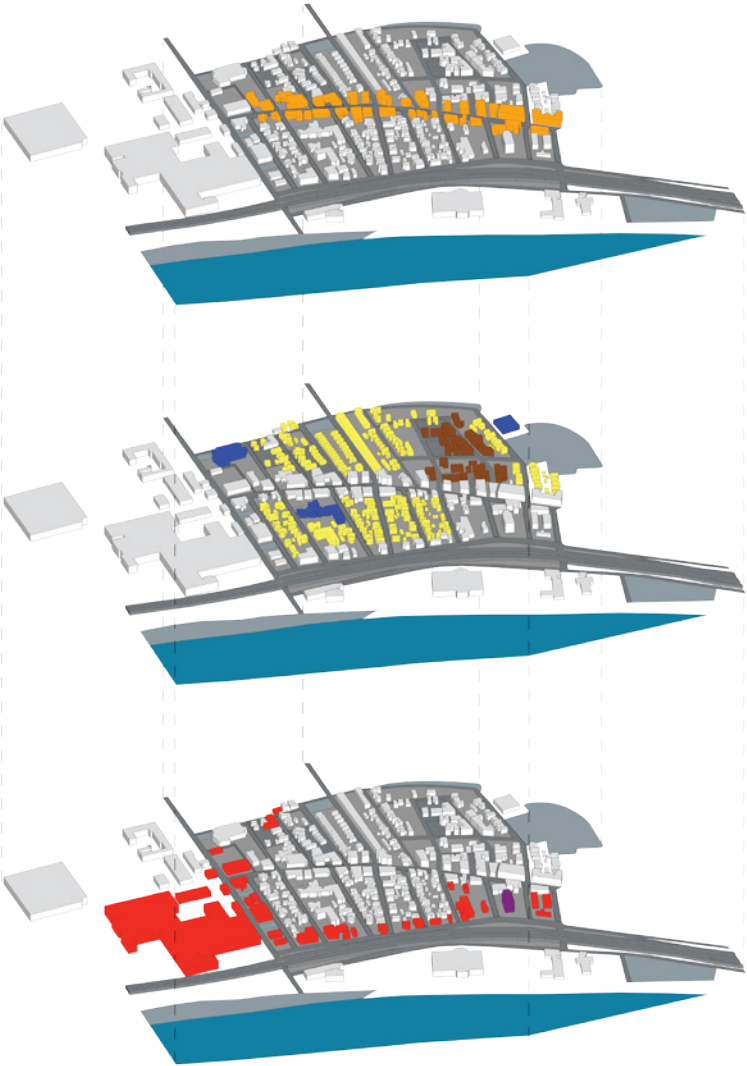
Residential:

The majority of the South End has 1 to 4- family units with the exception of the multi-family units (in brown).

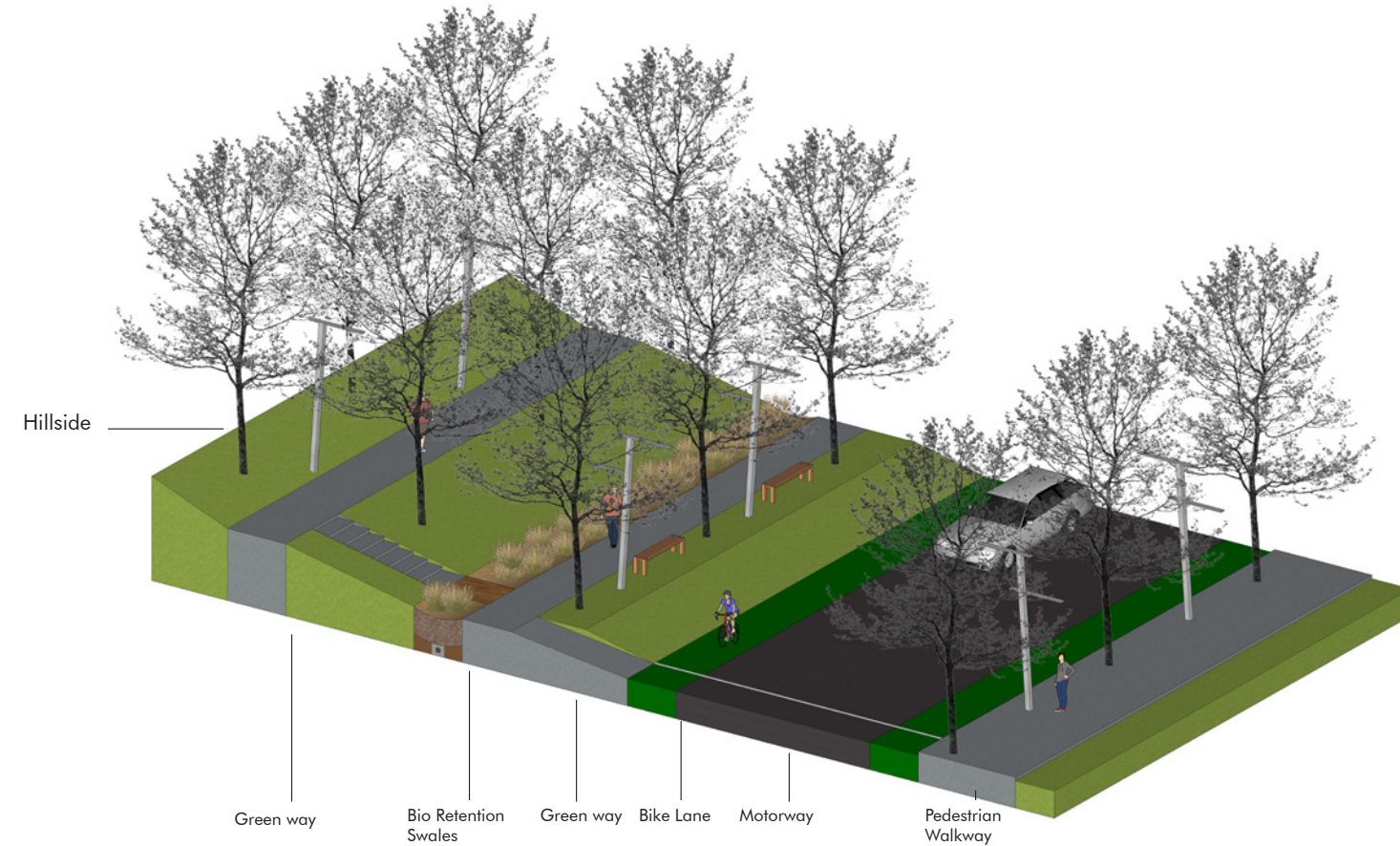
It is proposed to add residential uses off Main Street and Columbus Avenue while using infill on these major corridors to better block noise and other impacts from the residencies.

Commercial:

Infill of commercial land uses on the edges will create more job opportunities and amenities fro residents and visitors.



The Greenscape System in the South End



This hillside path parallel to Ashmun Street is following the bottom of the forested glacial terrace in Springfield. Bioswales are located between the green way and street's edge to catch and cleanse rainwater that is running down the steep section of the terrace. The captured and cleansed rainwater is directed to Emerson White Park. There it infiltrates into soil of the large, grassy areas. Plants of the Ashmun Greenway will include existing plants and newly planted, native forested plants. Some examples include oak, maple, sumacs, pines, and ferns. Benches and a bike lane along the Green way will offer various opportunities to sit and recreate.

Main Street Pocket Park



This pocket park design on Main Street is inspired by the New York Paley Park. The difference is that this pocket park has entrances on three sides - two of them are commercially used edges such as a cafe and a food market.

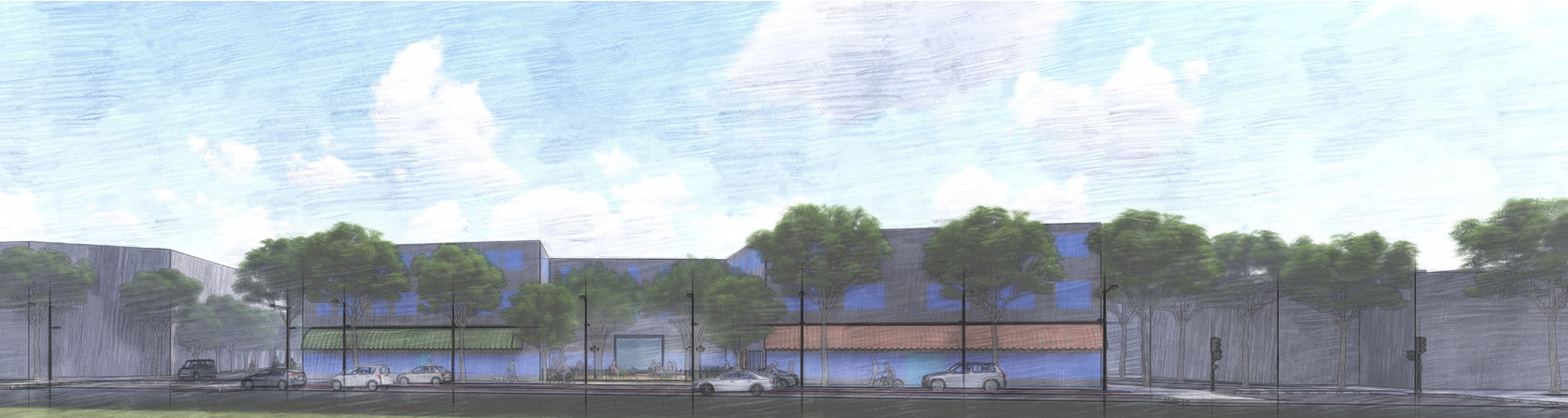
The Greenscape System in the South End



Pocket Park and Streetscape Main Street

The Greenscape System in the South End

Hao Fang • Kyle Navarro • Jasmine Su



Restaurant



Main Street Pocket Park



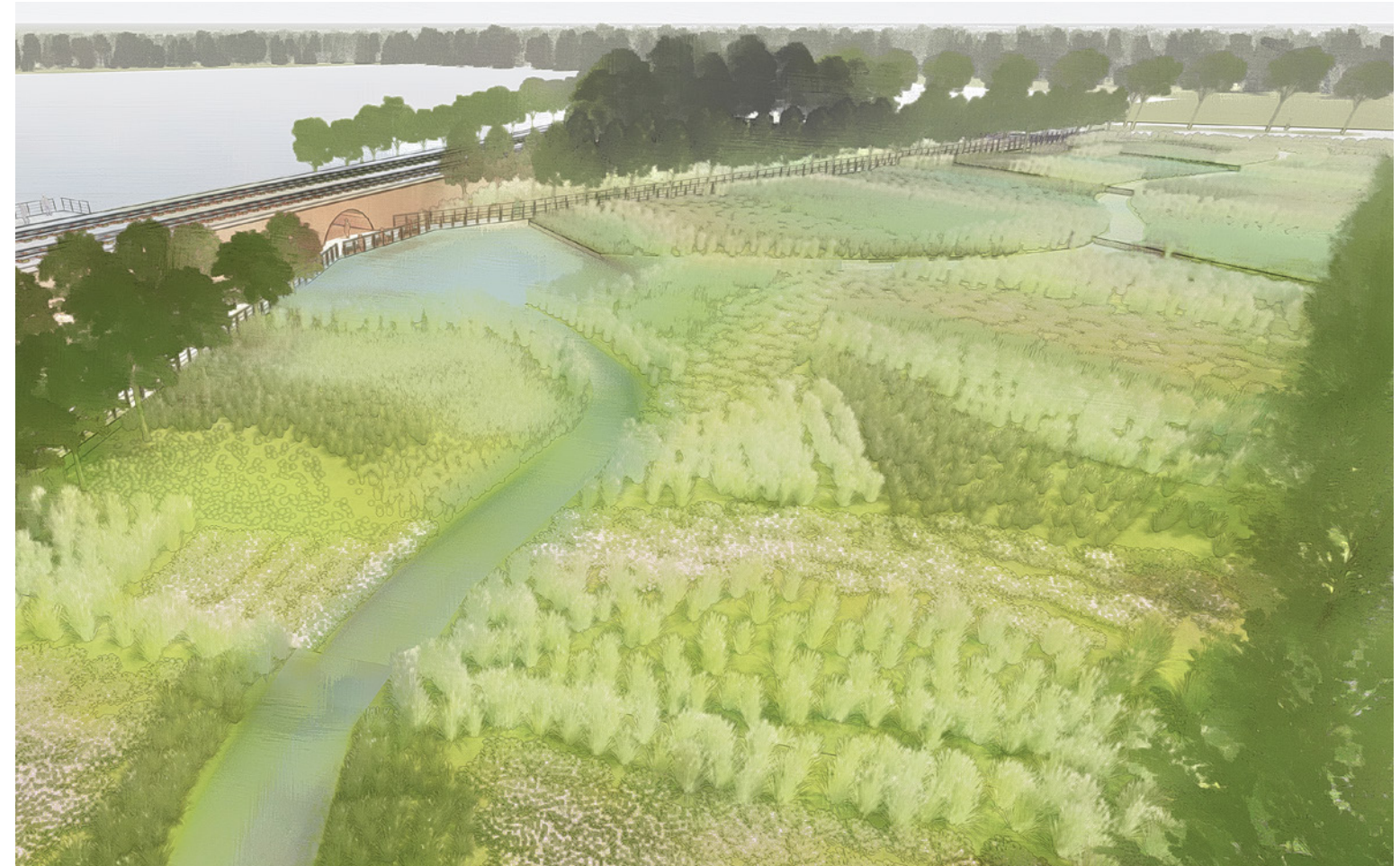
Food Market

The Greenscape System in the South End



Inside the Pocket Park

West York Storm Water Park



Hao Fang • Kyle Navarro • Jasmine Su

The Greenscape System in the South End

This proposed park will be located along the River's edge and is located at the abandoned jail site on the Connecticut River. Rain-water will be directed to this area so the city can prevent future floods. This park will be connected to Riverfront Park and the whole green network around the South End. The Stormwater park will reduce the number of Combined Sewer Overflows (CSO).



Detail Plan of West York Stormwater Park

Stormwater Pond in the middle of the park (right)



The Greenscape System in the South End

Springfield’s long term goal is to reduce the amount of CSO’s over the next 20-40 years that currently pollute the Connecticut River. CSO’s can be reduced through stormwater management such as stormwater and infiltration ponds. During heavy rainfall events rainwater is caught and filtered in vegetated pools and ponds. Stormwater parks can help clean out runoff water from streets and hillsides without having to go through a sewage treatment plant while creating an amenity for people. Having a stormwater park next to the river is a good solution to decrease combined sewage overflow and treat runoff water.

Benefits from CSO Control Projects Projects

	Construction Date	% Reduction of CSO Volume
Washburn CSO Control	2012 - 2014	11%
York St. Pump Station and River Crossing	2015 - 2020	54%
Locust Transfer & Flow Control Structures	2015 - 2016	1%
York to Union Box Culvert	2020 - 2027	12%
Union to Clinton Relief Conduit	2025 - 2029	6%
Worthington/ Clinton Stormwater Management & Selective Sewer Separation	2027 - 2031	4%
	Total	87%



The Greenscape System in the South End



Gemini Square

Hao Fang • Kyle Navarro • Jasmine Su



Gemini Square
This is a proposed new space and located on the former Gemini brownfield site. The square will be used for small events like a food market or flea market. Small neighborhood concerts, block parties or other small events can be held here. The area will be open for the most part with diverse seating arrangements. Tents can be set up along the corridors and there is plenty of space for people to sit on the grass. The place is great for picnics or a short lunch break. People walk through and enjoy a space to rest on their passage through the neighborhoods the green way network.

Detail Plan of Gemini Square

The Greenscape System in the South End

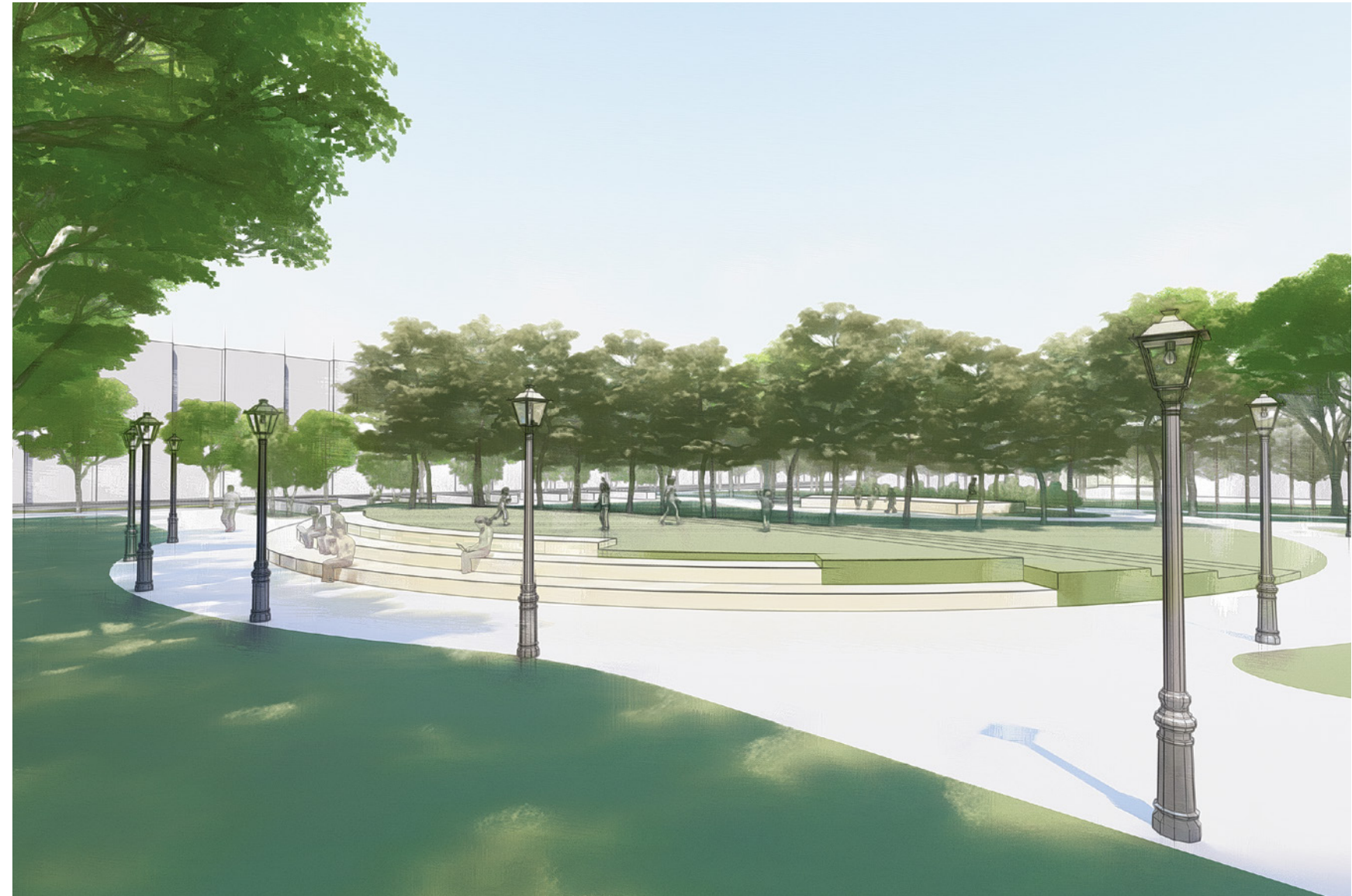
Hao Fang • Kyle Navarro • Jasmine Su



Section of Gemini Square Facing South

The Greenscape System in the South End

Perspective of Gemini Square facing Southwest



REFERENCES

- Bacon, Edmund N., "Design of Cities", Penguin, 1967
- Gehl, Jan, "Cities for People", Island Press, 2010
- Hester, Randolph T., "Design for Ecological Democracy", MIT, 2010
- Jacobs, Allan B., "Great Streets", MIT Press, 1993
- Jacobs, Jane, "The Death and Life of Great American Cities", Random House, New York, 1961
- Katz, Peter, "The New Urbanism: Towards an Architecture of Community", McGraw - Hill, New York, 1994
- Kostof, Spiro, "The City Shaped", London, Thames & Hudson, 1991
- Krieger, Alex and Saunders, William, Editors, "Urban Design", University of Minnesota Press, 2009
- Krieger, Alex, Andres Duany and Elizabeth Plater-Zyberk, "Towns and Town-Making Principles", Harvard GSD, 1991
- Krier, Rob, Urban Space Rizzoli, New York, 1979
- Larice, Michael, and Elizabeth McDonald, The Urban Design Reader, New York, Routledge, 2007
- Lynch, Kevin, Image of the City, MIT Press, Cambridge, MA MIT Press, 1960
- Marcus, Clare Cooper, "People Places: Design Guidelines for Urban Open Spaces", Van Nostrand Reinhold, New York, 1990
- Meyer, E., "Sustaining Beauty: the Performance of Appearance", JoLa – Journal of Landscape Architecture, Spring 2008
- Montgomery, Charles, "Happy City", Farrar, Strauss, and Giroux, 2013
- Owen, David, "Green Metropolis", Riverhead Books, 2009
- Rubenstein, Harvey, "Pedestrian Malls, Streetscapes and Urban Spaces", Wiley, 1992
- Sitte, Camillo, "The Art of Building Cities", Reinhold, 1945
- Smith, Frank J. and Randolph T. Hester Jr., "Community Goal Setting", Stroudsburg, PA: Hutchinson Ross Publishing Group, 1982.
- Sommers, Larry, "The Community Garden Book: New Directions for Creating and Managing Neighborhood Food Gardens in Your Town", Burlington, VT: Gardens for All/National Association for Gardening, 1984.